



CHINCHONA NEWS.

BY C. W. QUIN, F.C.S.

IN the *Technologist* for February there is a very interesting paper on chinchona culture in Jamaica, by Nathaniel Wilson, the island botanist. The quinine-yielding chinchona were introduced into the island in the autumn of 1860 by means of seeds, and by the month of October in the year following Mr. Wilson had the satisfaction of possessing over four hundred healthy young plants ready for planting out. The selection of too warm a site, however, killed nearly half of them, and it was found necessary to transplant the remainder to a much colder situation, the climate and soil of which proved to be all that could possibly be desired. Some of the plants of the *Chinchona succirubra* have attained a height of six feet, having a circumference at the base of the stem of four and a half inches. The grey barks *C. nitida* and *C. micrantha* being slower in growth have not reached so large a size. So far the experiment has been highly successful, and Mr. Wilson states that it would be difficult to find more healthy fruit trees in the neighbourhood. It is calculated that in about four or five years the plants will yield seeds; in the mean time they can be successfully propagated by cuttings and layers. It seems that the climate and soil of the island are particularly well suited for the growth and propagation of the most valuable of the chinchona, *C. succirubra*. The *Pharmaceutical Journal* for last month also contains several notes on the subject of the chinchona. A paper, read by Mr. John Eliot Howard at the January meeting of the Pharmaceutical Society, states that recent importations of Calisaya bark from Bolivia contain an unprecedented admixture of the root bark, which is, however easily distinguished by its peculiar characteristics, more especially its curly shape. A very favourable specimen gave only from 8 to 10 parts of alkaloids per 1,000, or about one-tenth the richness of ordinary Calisaya bark. The suicidal Bolivians, who have hit on the most certain method possible of extirpating the finest species of bark from their forests, are, it appears, much disappointed at the low estimation in which the root bark is held in Europe. Mr. Howard and Professor Bentley afterwards entered into some very interesting particulars with regard to the formation of the alkaloids in the living plants, for the details of which we must refer the reader to the original paper. The same number contains the report by Mr. Howard to the Under Secretary of State for India on the bark and leaves sent home in October last from the Government Chinchona Plantations at Ootacamund by Mr. Melvor, the superintendent. In a note accompanying the bark and leaves Mr. Melvor states that they were removed from the plants during the rains, that is to say when the sap was in full flow, the object being to ascertain how far the period of the year at which the bark was gathered affected the supply of alkaloids. The plants under cultivation give unmistakable signs that they do not require so rainy a climate as they are represented to thrive under in the Andes, the grey barks, especially, having suffered from the unusually wet season. In speaking of the leaves, Mr. Howard says, "I regret to be obliged to confirm the opinion I expressed in my last that the leaves will not supply material for the extraction of quinine." The first rough precipitation from an acid solution only amounts to 1.31 per cent. The alkaloid seems to exist in the leaves in intimate connexion with the colouring matter. The latter substance promises to be very interesting, being somewhat analogous to indigo. Its solution by reflected light is blood red, by transmitted light a fine green. Mr. Howard expects that the investigation of this substance will throw much light on the formation of alkaloids in the plant. With the exception of the specimen of the bark of the *Chinchona Pahudiana*, the value of which as a quinine-yielding plant is questionable,

all the others yielded very satisfactory results. They were all, however, in too small portions for extensive examination.

A correspondent of the *Journal* states that the hydrochlorates of quinine, quinidine, and chinchonine may be distinguished from the sulphates of the same alkaloid by their fusing and giving off purple fumes when heated in platinum foil. It seems that samples of the hydrochlorate of chinchonine have been lately passed off as sulphate of quinidine.

Strecker, by boiling monobrominated chinchonine with an alcoholic solution of potash, and passing through it a current of carbonic acid, has succeeded in forming a substance having precisely the same composition as quinine, but possessing different properties. It will be remembered that chinchonine differs from quinine in having two equivalents less of oxygen. The new substance which possesses the properties of an alkaloid has been called by Strecker oxychinchonine. It crystallizes in colourless plates, and differs from quinine in not giving fluorescent solutions. Its salts crystallize with difficulty, the most crystallizable being the neutral sulphate and oxalate. It remains to be seen whether its therapeutic effects are also different.

It will be noticed that throughout the above article we have adopted the new method of spelling the word "chinchona" and its derivatives. We do so on the very highest authority—that of Mr. John E. Howard, the learned author of the "Nueva Quinologia." The word being derived from the patronymic of the Countess of Chinchon, the first patient who experienced the curative effects of Peruvian bark, it should certainly be spelt "chinchona" if there be anything in a name.



UNITED SOCIETY OF CHEMISTS AND DRUGGISTS.

PROCEEDINGS OF THE EXECUTIVE.

A special meeting of the Executive Committee was convened to receive correspondence from district committees, urging the desirability of joint action with the Pharmaceutical Society at the present juncture, and for the transaction of important business in connexion with the Incorporation and Defence Fund. The following gentlemen were present:—Messrs. Ablett, Cawdell, Congreve, D'Aubney, Fitch, Heppel, Hunt, Page, Preston, Robertson, Stokoe, and Wade. Alfred Preston, Esq., Vice-President, in the chair.

After the disposal of a large amount of routine business, the Secretary announced that he had the pleasure to state that Mr. Thomas Burgoyne and Mr. Alfred Preston had kindly consented to act as treasurers to the Incorporation and Defence Fund.

A lengthened discussion then took place upon the propriety of communicating with the Council of the Pharmaceutical Society; and it was ultimately agreed that the Secretary should address a letter to the Council, asking for a conference to be appointed, when a mutual consideration of certain propositions of great importance could be discussed.

At an adjourned meeting, held on the 12th inst., a letter from the Pharmaceutical Society, addressed to Mr. C. F. Bnott, was read; and in reference thereto it was unanimously agreed—"That the Executive Committee of the United Society of Chemists and Druggists, in accordance with the desire of their district committee, having addressed a letter to the Council of the Pharmaceutical Society, suggesting that a conference be appointed to consider certain propositions highly affecting the interests of the entire trade, and calculated to promote a friendly co-operation, now express their deep regret that their application has not been responded to."

Various district committee business, which had been adjourned at the last meeting in consequence of great pressure, was then transacted; and at the close of the business the Secretary stated that the committee had been enabled to invest a further sum of £100 to the credit of the Benevolent Fund, received in various sums specially remitted for this purpose, particulars of which will be published in the Annual Report.

The Secretary also reported that the Incorporation and Defence Fund was making a very satisfactory progress.

The following letters refer to the communication with the Pharmaceutical Society:—

United Society of Chemists and Druggists,
20, New Ormond-street,
London, February 27th, 1864.

Sir,—The Executive Committee of the United Society of Chemists and Druggists having received from their different district committees resolutions strongly recommending the desirability of a friendly co-operation with the Pharmaceutical Society, with reference to the proposed new Medical Bill, have this day held a special meeting to discuss the same.

Having taken this matter into consideration, the Executive Committee are deeply impressed with the important results that would follow a general union of co-operation, conducted in a cordial and friendly spirit, with a view to obtain either an Act of Incorporation or an extended Pharmacy Act upon the following basis:—

1. A recognition of existing interests.
2. The right of self-government secured by a full and fair representation of the entire trade.
3. The competency of all future candidates ascertained by a simple and inexpensive form of examination, but sufficient to secure the practical knowledge required.
4. That the chartered privileges of the Pharmaceutical Society are not in any way interfered with except by their consent.

In reference to the above, I have the honour to be instructed to inquire, through you, whether the Council of the Pharmaceutical Society are willing that a conference be held, when these propositions can be thoroughly discussed.

I am, Sir, your most obedient servant,
C. F. BUOTT,
Secretary.

Elias Bremridge, Esq.,
Secretary and Registrar,
Pharmaceutical Society of Great Britain.

Pharmaceutical Society of Great Britain,
17, Bloomsbury-square, W.C.
March 2, 1864.

Dear Sir,—I have laid your communication before the Council, and in reply I am instructed to inform you that they have now under consideration an amended Pharmacy Bill, which will be submitted to the special general meeting of the members of this Society on the 17th instant, and which the Council believe will preserve the vested interests of chemists and druggists already in business, and meet with general approbation.

I am, dear Sir, your obedient servant,
(Signed) ELIAS BREMIDGE,
Secretary and Registrar.

Mr. C. F. Buott, 20, New Ormond-street, W.C.

The following is a copy of correspondence in reference to a misstatement made in the last number of the *Pharmaceutical Journal*:—

United Society of Chemists and Druggists,
20, New Ormond-street,
London, March 1, 1864.

Sir,—In the account of the general meeting of the Liverpool Chemists' Association in this day's *Pharmaceutical Journal*, you are reported to have said that "you had received a printed copy of a requisition from the United Society of Chemists and Druggists, urging the necessity to incorporate their body with the Pharmaceutical Society, and to obtain an extension of the Pharmacy Act."

For the information of the Executive Committee of the United Society of Chemists and Druggists, will you be kind enough to favour them with your authority for stating that this document is a requisition from this Society? Is it not the memorial to the Pharmaceutical Society got up on their behalf, but altered by several members of the trade who recognize the desirability of a friendly co-operation between the two societies?

It is a very different proceeding to express this kindly feeling, and to make an official application as thus represented. Should you not be able to furnish this information, it is, of course, a matter of regret that it did not occur to you that the Executive Committee were unlikely to have issued such a requisition without the authority of the whole of their members and supported by the trade, and that they would have addressed it to the proper official quarter, where it would have, at least, received the respect that such an application was entitled to. It is also a matter of regret that your statement was accompanied by disparaging remarks upon either the opinions or principles of the United Society, which have in the short space of three years secured nearly three thousand members from a body of gentlemen who may fairly be presumed to form the best judgment upon the matter that they are most concerned in.

I am, Sir, your obedient servant,
C. F. BUOTT,
Secretary.

Dr. Edwards, Local Secretary to the
Pharmaceutical Society, Liverpool."

United Society of Chemists and Druggists,
20, New Ormond-street, W.C.
London, March 5, 1864.

Sir,—I wrote you on the 1st instant with reference to a statement made by yourself injuriously affecting the interests of this Society, to which I have not yet received your reply.

"Permit me to draw your attention to same, and to take this opportunity of saying that as the statement was incorrect and made at a public meeting, and also reported in the columns of the *Pharmaceutical Journal*, it will be necessary to publish this correspondence.

I am, Sir, yours obediently,
C. F. BUOTT,
Secretary.

Dr. Edwards, Local Secretary to the
Pharmaceutical Society, Liverpool."

Royal Institution Laboratory,
Liverpool, March 8th, 1864.

Sir,—I regret to find that upon the occasion to which you refer, my remarks were misunderstood by the Secretary of the Chemists' Association,

and therefore incorrectly reported in his minute of the meeting printed in the *Pharmaceutical Journal*. The memorial to which I referred was the one addressed by members of the Pharmaceutical Society to its own Council, and which I alluded to in order that members who felt disposed might have an opportunity of signing it. The memorial was forwarded to me by Mr. B. Orridge, whom I believe to be a member and friend of both Societies; and in bringing it under the notice of the meeting, I believed I was fulfilling his wishes.

The general purport of my remarks were by no means intended to be disrespectful to the chemists and druggists as a body, or to the United Society. I endeavoured to point out that the circumstances of the present movement resembled those which brought the Pharmaceutical Society into existence some twenty-three years ago—viz., an aggressive medical bill; and that the remedy suggested by the executive of the United Society was identical with that proposed by the founders of the Pharmaceutical Society, and embodied in their charter of incorporation, and in their early projected pharmacy bills; for the exposition of which, see *Pharm. Journal*, 1st series, Vol. v., No. 11, page 481, and Vol. xii., No. 1, page 1. In the former article Mr. Bell remarks, page 481,—"If all the chemists in the nation, or even a very large majority, had united in the undertaking, this course might have been free from objection." The same "If," in my judgment, applies to the proposed enactments of the United Society. The objects of the movement appear to me identical with those of the Pharmaceutical Society; viz.,—protection of existing interests; a sound basis of education; a representative governing body; restrictive legislation for the future.

The standard of qualification and the amount of subscription necessary are matters of detail to be determined by the discretion of the governing body. In the address to the trade, the United Society espouse the cause of 35,000 chemists and druggists, and in your note to me you speak with some satisfaction of the adherence of nearly 3,000 members in three years. Assuming these figures as a correct estimate of the parties interested, and exclusive of members of the Pharmaceutical Society, I fear you will find the apathy of the odd 32,000 as dead a weight as the Pharmaceutical Society experienced it to be twenty years ago.

But, as an encouragement to all sanguine promoters of improved pharmaceutical education, I enclose you a draft for a small contribution towards your preliminary expenses, and trust that your efforts may result in the incorporation of the entire trade with the good old Pharmaceutical Society (which has long fought your battles) at your head.

Please place this in your list of contributions as "A Friend to Pharmaceutical Education."

I am, in such a cause,
Yours faithfully,
J. BAKER EDWARDS.

To C. F. Buott, Esq.

United Society of Chemists and Druggists,
20, New Ormond-street,
London, March 10, 1864.

Sir,—I have to acknowledge the receipt of your friendly letter to hand this day, accompanied by a kind remittance of two guineas towards our expenses, and duly note your wishes concerning same.

In concluding this correspondence, I have only to add in reference to your remark, that the objects of the two Societies are identical; that if praise is claimed on behalf of the Pharmaceutical Society for its services, it is equally a matter of right that the usefulness of the United Society in securing so very many additional supporters of the same cause should be frankly acknowledged.

I am, Sir, yours very truly,
C. F. BUOTT,
Secretary.

Dr. Edwards,
Royal Institution, Liverpool.

BIRMINGHAM.

A meeting of the Chemists and Druggists of Birmingham and district was held in the Temperance Hall, Birmingham, on the 4th inst., to consider the new Medical Bill, as affecting chemists and druggists generally. Mr. Snape presided over a numerous meeting. Mr. Atkins moved the first resolution:—

"That the chemists and druggists now assembled recognize the desirability of giving all possible encouragement to scientific and educational qualifications for the trade of a chemist and druggist, but they consider themselves, in common with their brethren, quite competent to accomplish all needful reforms in their own body, and therefore repudiate sections 56 and 57 of the proposed Act of the Medical Council as being unjust in principle, and an unwarrantable attempt to interfere with their rights as private citizens."

Mr. Atkins, in moving the resolution, said that it was very unfair on the part of the Medical Council to ignore the chemists and druggists.

Mr. Buott, Registrar to the United Society, and representative of the Executive Committee, seconded the proposition, and, in doing so, said that he held it to be exceedingly ungenerous on the part of any individual to represent that the United Society of Chemists and Druggists was unfriendly to the Pharmaceutical Society and its objects. All that the United Society sought for was to obtain such a reform of the trade as should be beneficial to the trade itself and satisfactory to the public. They were desirous to obtain this with the concurrence of the Pharmaceutical Society; but if this were not given they were determined to carry out the reform for themselves. There was a very prevalent idea in this part of the country that the chemists and druggists were very desirous to have protection themselves, but were unwilling to

recognize the principle of examination which was necessary to give protection to the public. Some weeks ago a meeting was held in a neighbouring county, at which a gentleman gave expression to the opinion that examinations and diplomas were altogether unnecessary. He believed that was an undigested opinion, and, in support of this opinion, he could mention that, at a meeting held in London, in November last, at which between two and three hundred persons were present, a gentleman entertained a similar opinion, and put it in the form of an amendment to a resolution. The consequence was—and this would show the opinion entertained by the general body—that he could not find even a seconder to his amendment. The question between them and the Pharmaceutical Society was an important one. It was this, whether chemists and druggists in this country should be subject to the control of, and render tribute to, the Medical Council, without having a voice or representation in that council. (Hear, hear.) He would state a few reasons why the chemists and druggists objected to the bill. They objected to the jurisdiction of the Medical Council,—firstly, because they *had* no jurisdiction; secondly, because the Medical Council was an irresponsible body, at any rate that they were not responsible to the chemists and druggists; thirdly, because the Medical Council had enough business of its own to attend to; fourthly, because the doctors were opposed to, and had no interests in common with the chemists and druggists. (Cries of “No, no,” and “Not in the country.”) They claimed both sides of the druggist’s counter, and the principal ground of objection was, that were the proposition of the doctors carried, it would deprive one-half of the population of the country of medical aid, and would leave the other half to the mercies of the doctors. (Hear, hear.) Out of thirty millions of men, women, and children in the United Kingdom, there were at least fifteen millions who never went near a doctor, except it be in a case of urgent danger. Millions who had no means wherewith to pay doctors’ bills, took their ailments to the shop of the chemist and druggist. If there were one thing which more than another would be cruel to the poor of this country, it was that this proposition of the Medical Council should be agreed to. The body of chemists and druggists were determined to resist the efforts of any council, medical or pharmaceutical, to thrust any measure down their throats which should act to their own disadvantage, and with disadvantage to the public.

Mr. Christian moved, as an amendment, that the proposed bill, in its present form, be strenuously opposed by the chemists and druggists present, and that a fund be raised for the purpose. In moving the amendment, Mr. Christian said that he opposed the resolution because it seemed to him to be setting class against class. He had been a member of the Pharmaceutical Society for many years; and while he maintained that the proposed measure was grossly oppressive, he did say that the setting medical men against chemists and druggists was very unfair to the former body. As a member of the Pharmaceutical Society he did not know anything at all about the United Society of Chemists and Druggists.

Mr. Hollier, of Dudley, seconded the amendment, and in doing so said, that whilst he also was a member of the Pharmaceutical Society, he entirely agreed that the proposed measure was a very oppressive one.

Mr. Dymond and Mr. Hollier each affirmed that the Medical Bill was permanently shelved. Mr. Bird said that, at any rate, it would be well to adjourn the meeting to a later date, until a general meeting of the members of the Pharmaceutical Society, which is called up for the 17th in London, had been held. He moved that the meeting be adjourned until the 27th inst. Mr. Dymond seconded the amendment. The amendment of Mr. Bird was lost by a large majority. Mr. Christian was *solus* in the division upon his own, and the original motion was carried by a large majority amid much confusion, which continued until the close of the meeting. It was resolved,—“That an Act of Incorporation, based upon the suggestion of the Executive Committee of the United Society of Chemists and Druggists, is most desirable; and this meeting would urge upon the trade the necessity of a combined and determined effort for its attainment; and that the opinion of the meeting be made known to the Pharmaceutical Society and the Medical Council, with an intimation that the chemists and druggists desired to be consulted on any measure connected with their interest; and that they would accept no proposition which did not recog-

nize the desirability of an incorporation of the whole trade, and giving the right to self-government; and that copies of the resolution of that meeting and the objectionable clauses in the Medical Act, with the suggestions of the United Society of Chemists and Druggists, be forwarded to Mr. Scholfield, M.P., to Mr. Bright, M.P., and to the members of Parliament in the counties of Worcester, Warwick, and Stafford, with the request that they will withhold their sanction from any bill acting upon chemists and druggists, which had not the sanction of the United Society of Chemists and Druggists.” These propositions were carried by large majorities, and a vote of thanks to the chairman terminated the stormy meeting.

BOLTON.

An influential meeting of the Chemists and Druggists, members and non-members of the United Society of Chemists and Druggists, was held at the Swan Hotel, on Wednesday evening, the 2nd inst., the chair being occupied by Mr. James Scowercroft, senior member of the trade in this town; resolutions were passed, a committee appointed, and a fund commenced for the formation of a branch society to act in concert with the Manchester District Association of the United Society of Chemists and Druggists. A most unanimous feeling pervaded the meeting as to the desirability of more united action, not only in resisting the inroad which the Medical Council of London would make in their business—by forcibly taking from thousands of chemists and druggists the right to prepare physicians’ prescriptions, except under certain circumstances totally incompatible with the ideas of the great bulk of the chemists and druggists, who are and have been in business many years, and of whom many are men of high standing in the trade, who have carried on their business with honour and profit to themselves and credit to the trade at large—but to band themselves together to resist at any future time unjust class-legislation. The Bolton chemists are fully alive to the necessity of raising the standing and qualification of the trade or profession (under whichever designation it may come), and will cordially embrace any measure that will have that effect without materially affecting the vested interests of those now in business. “Unitate Fortis.”

COVENTRY.

A meeting of the members of the United Society and the trade was held in this city, on the 2nd inst., to take into consideration the obnoxious clauses of the proposed Medical Act. Mr. Alderman Wyley presided on the occasion, and called upon Mr. James Hinds to introduce the business of the meeting. In doing so, Mr. Hinds, after alluding to the report of the meeting held recently at Dudley, explained the very unjust character of the proposed bill, and arbitrary way in which the interests of the entire body of chemists and druggists were intended to be dealt with, and also the insulting manner in which their undoubted right of self-government was entirely ignored. After a discussion upon the various points thus raised for consideration, it was unanimously resolved that the very objectionable character of the proposed Act should be pointed out to the members of Parliament for the city, in a petition embodying the same; and that they be requested to support its prayer. Amongst the gentlemen who took a part in the proceedings were—Mr. Alderman Wyley, Mr. Alderman Jenkins, and Messrs. Astley, Bailey, Wingrave, Field, and Hinds.

HULL.

The Inaugural Supper of the Hull Branch of the United Society of Chemists and Druggists was held at the George Hotel, Whitefriargate, on Friday evening, the 11th inst. The Mayor of Hull, J. Lumsden, Esq., was to preside, and the Members of Parliament for the borough signified their intention of honouring the society by their presence. We will give particulars of this interesting event in our next.

MAIDSTONE.

On the 10th ult. a meeting of the Chemists and Druggists was held at the Haunch Hotel, Mr. Simpson in the chair, for the purpose of taking measures to resist the unwarrantable interference of the proposed Medical Act with the trade.

The Chairman briefly stated the object in view, and after commenting on the necessity that existed for co-operation, in order that the portion of the bill most obnoxious to the trade might be defeated, concluded by remarking that we had a

proof that "unity is strength," inasmuch as the part of the proposed measure relating to patent medicines had already been expunged, no doubt owing to the determined front presented by the vendors of proprietary articles. It was very satisfactory to feel that he was surrounded, without a single exception, by members of the United Society of Chemists and Druggists.

One member said, for his part, he never could believe that a bill would be permitted to pass ignoring so utterly existing interests; but it was well to be forearmed, as the passing of such a bill into a law was not impossible. and, when too late, chemists might find themselves in the position of frozen-out gardeners, or, like Othello, with their occupation gone. He thought the best plan would be to copy from the Medical Bill No. 56 and 57 clauses, and to forward the same to each of the Members of Parliament for the borough, soliciting their earnest attention to the matter. After a further discussion of the subject by the gentlemen present, it was voted unanimously that the above arrangement should be adopted.

Amongst the gentlemen who took part in the meeting were Messrs Fardon, Cooper, Wimble, Price, Cox, Winson, and Holliday.

NEWCASTLE-ON-TYNE.

A meeting of the Newcastle Local Association of the United Society of Chemists and Druggists was held at the Turk's Head Hotel, Grey-street, on Thursday, the 18th ult. The chair was occupied by Joseph Fairs, Esq., who opened the proceedings by stating that the meeting had been called for the purpose of discussing certain clauses in a bill intended to be introduced into Parliament by the General Medical Council, and affording members an opportunity of entering their protest against them. He called their attention to the coercive and mischievous nature of those clauses, stigmatizing them as arbitrary and unjust, and urging the members to unite as one man in resistance to a measure calculated to annihilate the trade of nine-tenths of those at present in business. In the course of his remarks he paid a just tribute to those who originated the United Society of Chemists and Druggists; and especially to the talented and indefatigable Mr. Buott, who first sounded the tocsin in this district and put the trade on their guard against the nefarious scheme of the Medical Council. He also pointed out the necessity of contributing liberally to the Defence and Incorporation Fund, as a duty incumbent upon all who wished to preserve their liberty from the threatened aggression of the Medical Council, and all other enemies of their legitimate rights and interests.

The following resolution, proposed by Mr. Eno and seconded by Mr. Ward, was carried unanimously:—"That this meeting having learnt that in a bill about to be applied for by the Medical Council during the present session of Parliament, clauses have been introduced seriously affecting the rights and interests of chemists and druggists, and which, if passed into a law, would disqualify nine-tenths of those at present engaged in business from pursuing their lawful calling, resolves, that so unwarrantable an attempt to deprive a large body of respectable tradesmen of the privileges they have hitherto enjoyed, by subjecting them to arbitrary and unnecessary tests and restrictions, is deserving of strong condemnation; and this meeting pledges itself to resist by every means in its power so unjustifiable an invasion of rights, just in themselves, and which the Medical Council have no title to interfere with."

The following resolution was next proposed by Mr. Elliott:—"That the suggestions of the Executive Committee of the United Society of Chemists and Druggists for an incorporation of the trade are reasonable and just, and the local secretary is hereby authorized to send a copy of this resolution to the Right Hon. T. E. Headlam and Somerset Beaumont, Esq., the Borough Members, requesting them to withhold their support from any measure injuriously affecting the rights of chemists and druggists, until it has been submitted to the judgment of the trade."

In moving this resolution, Mr. Elliott said that the proposed Act of Incorporation had been well devised, and if it became law, it would be to them a sure defence against legislative interference with their existing rights. The chemists in Newcastle and other towns ought to do all in their power to strengthen the United Society, and work vigorously to obtain the Act. The medical men should legislate for themselves, and leave the chemists and druggists to do likewise.

It was much to be desired that there should be some test of qualification, but that could be safely left in the hands of the chemists and druggists. He would not advise his hearers to place much reliance on the Pharmaceutical Council, for its action with respect to the Juries Bill proved that it would rather obtain special privileges for pharmaceutical chemists than equal rights for all chemists and druggists.—The resolution was seconded by Mr. Marley, and unanimously carried.

It was then proposed by Mr. Ward and seconded by Mr. Ridley:—"That copies of these resolutions, and an account of this meeting, be sent to the Editors of the CHEMIST AND DRUGGIST and *Chemical News*, with a request that they will insert the same in the next number of their publications."—Carried unanimously.

A fourth resolution proposed by Mr. S. E. Watson, and seconded by Mr. Ward, was as follows:—"That this meeting be adjourned for a month from this date; that the thanks of the meeting be given to Mr. Fairs for presiding, and that he be authorized to call a meeting earlier if he should deem it necessary." This was also carried unanimously.

A subscription was then entered into towards the Defence Fund, which was liberally responded to by those present. A conversation ensued with regard to calling upon those members who were not present at the meeting, to solicit their subscriptions and impress upon them the necessity of their attendance at the next meeting. It was finally arranged that the following gentlemen should form the deputation:—Mr. Elliott, Mr. Ward, Mr. Marley, and Mr. Brockett (local secretary).

[We cannot find space for the report of the meeting at the Potteries referred to in our last. Reports of meetings at Preston and Liverpool have just reached us; these shall be included if possible in our April number.]

GENERAL NEWS.

THE MANCHESTER CHEMISTS AND THE BRITISH PHARMACOPŒIA.

Our Manchester friends, finding that the peculiarities of the new Pharmacopœia present perplexing difficulties to the accurate and satisfactory dispensing of prescriptions, have taken steps to promote a conversation on the subject between the prescribers and dispensers of medicine. Mr. J. T. Slugg, who is always willing to labour for the advancement of our trade, has consented to deliver a lecture, in the Hall of the Athenæum, this afternoon (March 15), on "The British Pharmacopœia, its contents, effects, and defects;" and at the close of the lecture a discussion will take place as to the general adoption of the work in Manchester and its vicinity. Medical men and chemists have been invited to attend, and we have no doubt that the discussion will smooth away many difficulties.

THE CHEMISTS OF EDINBURGH AND THE NEW PHARMACOPŒIA.

At a meeting of Chemists and Druggists, held in 5, St. Andrew-square, on the 8th ult., Mr. Robertson in the chair, for the purpose of considering the changes rendered necessary by the publication of the British Pharmacopœia, it was agreed—

1. That it is desirable the formulæ of the British Pharmacopœia be adopted as speedily as possible. As, however, it may be presumed that many practitioners will continue to prescribe by the old formulæ, in order to guard against mistakes, it is recommended in the meantime, that a double set of bottles be kept where this is felt to be necessary.

2. That all prescriptions of older date than the publication of the British Pharmacopœia be dispensed according to the formulæ then existing.

3. That when a prescription is now dispensed, and any preparation of the British Pharmacopœia employed, this fact should be intimated by the insertion of the letters B.P. by the party by whom it is first dispensed.

4. That when Liquor Taraxaci is ordered, the Succus Taraxaci of the B.P. is to be given; but when Extractum Fluidum Taraxaci is ordered, the dark-coloured preparation is to be used.

5. That as the B.P. contains no directions as to the division of the pill masses, it is agreed, unless otherwise specially ordered, that all the pills made according to the new formulæ

weigh four grains, instead of five, as has hitherto been the case, with the following exceptions:—Pil. Opii—Pil. Calomel. Co.—and Pil. Ferri Carb. Sacch.—which shall each weigh five grains.

CHEMISTS' AND DRUGGISTS' SOIRÉE AT GREENOCK.

The following report was forwarded to us by a clever member of the trade:—

"On the evening of Thursday, the 3rd of March, it was evident to all that something unusual was astir with the chemists and druggists of Greenock and their assistants. As eight o'clock drew nigh, apprentices might have been seen hastily putting up shutters, assistants speedily dismissing their customers, and even the masters themselves, in general apathetic as to the early closing of their doors, this evening, at least, were in earnest. Six weeks ago, when the idea of a soirée was first mooted, it was pooh-pooled by those who should have been foremost in giving a helping hand. The manner in which one or two of the trade acted is anything but creditable. Not content with standing aloof, they did all they could to disarrange the programme, thinking that, if unsuccessful in preventing it coming off, they might at least mar the enjoyment of the evening. However, the energy of the committee was not to be baffled, and having obtained Mr. John Fergusson's consent to take the chair, every arrangement was prosecuted with vigour, and the evening of the 3rd March saw seated in the Assembly Rooms, Cathcart-street, a galaxy of beauty which did credit to the profession, and will long be remembered by those present.

"The company, which numbered nearly 200, having partaken of an excellent tea, purveyed by Mr. Borland, Temperance Hotel, the chairman—who on rising was greeted with rounds of applause—after some introductory remarks, proceeded to notice the special need for organization among chemists, by referring, in humorous terms, to the dislike the public had to their mixtures, and the exaggerated notions which prevailed as to their profits. He then noticed the proposed bill which the Medical Council are threatening to introduce into Parliament, and which is intended to place serious restrictions on the trade: he urged the necessity of masters combining together, and not remaining divided, when their interests were at stake, and impressed upon assistants and apprentices the urgency of forming themselves into a society, so that by storing their minds with every requirement of the trade, they might be enabled to act their part in the battle of life, and fearlessly face any examination that might be required of them. He also exhorted them to patience and caution in the performance of their duties, as to attention to their employers' interests, to being regular as to hours, and to studying integrity, justice and truth in all their actions. He impressed the necessity for leisure time being usefully spent, and no better relaxation could be recommended than that afforded by the sweet refinements of literature. He concluded in some humorous remarks, being certain that young ladies would have the good sense to enable them to appreciate the immeasurable superiority of the man diligent in business over the simpleton whose mind was taken up by coining soft words and tender phrases, the meaning of which was no plainer to him than a dream of cloudland. During the evening songs and duets were sung by Messrs. J. A. Burn, O. Bussey, Colin Campbell, Stephen Young, and Miss Lamb, which were well received. Mr. Young so ably sustained the comic department as to be enoored in all his songs; his make-up was truly excellent, and the natural manner in which each character was assumed, together with the never-ending trade allusions, so enraptured the audience, that we are assured it will not be the committee's fault if Mr. Stephen Young does not grace the next soirée of the chemists and druggists of Greenock.

"Mr. McWilliam, manufacturing chemist, also gave an address on chemistry, in its social and domestic phases, which added not a little to the enjoyment of the evening. At the close, votes of thanks were moved by Mr. Fraser, to the musical entertainers; by Mr. Macnought, to the committee of management, Mr. Burgess replying; and by Dr. Fox, to the chairman. Immediately on singing "Auld Lang Syne" the hall was cleared for dancing, which was kept up with vigour until far in the morning, to the excellent music of Mr. Wallace's quadrille band."



The Prescriber's Analysis of the British Pharmacopœia. By J. BIRKBECK NEVINS, M.D. Lond., Lecturer on Materia Medica in the Liverpool Royal Infirmary School of Medicine. London: John Churchill and Sons. Price 2s. 6d.

This is one of that nice series of useful little books published by Messrs. Churchill. It contains ninety-one pages of valuable information, condensed into such small compass that it can be conveniently carried in the pocket, and, therefore, may be always at hand for reference. The book commences with a few introductory remarks, in which the author states that "the object of the present analysis is to enable the prescriber, at a glance, to see whether any change has been made in the formulæ that he has been accustomed to use, and if so, what is its nature and extent." The principal contents of the work may be thus enumerated: a "list of important alterations of strength or composition in medicines which still retain their old names unchanged;" a "general outline of changes in the new Pharmacopœia classified;" a short notice respecting the "change of weights;" a "list of medicines in modern use which have not been admitted into the British Pharmacopœia;" a "list of medicines and preparations introduced into the new Pharmacopœia, which were not previously contained in either the London, Dublin, or Edinburgh Pharmacopœias, with their doses and properties;" a "list of substances and preparations, omitted from the British Pharmacopœia, which were formerly in the London, Dublin, or Edinburgh Pharmacopœias;" a "general list of differences between the British Pharmacopœia and those of the London, Dublin, or Edinburgh, including both additions, omissions, and alterations, either of name, strength, or ingredients, and the doses;" and, lastly, some "formulæ illustrative of the alterations required in prescribing by the new or altered medicines, preparations, and symbols now employed in the British Pharmacopœia." Under their appropriate heads, the author gives the strength, doses, and uses of the new preparations; and in those that have undergone alterations in strength or composition, the changes that have been effected are concisely and clearly pointed out. In the general list, and the list of omissions, the Pharmacopœia in which the substances or preparations were official is denoted by the appendage of the initial letter of the respective college to which it belonged. Throughout the work we meet with many useful little hints, and imagine the list of formulæ will frequently be found serviceable. The alphabetical arrangement in the different lists will facilitate reference. The only defects we notice are a few in the printing, which have escaped the vigilance of the proof corrector. We doubt not but that this little work will prove a valuable companion to many a practitioner.

A Dictionary of Chemistry, etc. By HENRY WATTS, B.A. Part XIII. Glucose—Gytge. Longmans. 2s. 6d.

This part completes the second volume and the letter G. The Index gives references to nearly two thousand subjects which come in the alphabetical arrangement between Conhydrine, one of the alkaloids of hemlock, and Gytge, a peculiar mud found in Norway. The most interesting articles in the present part are those on Glycerin, Gums, Gunpowder, Gutta-percha, and Gold-assaying. The last is a detailed account of the assay process in its highest refinements as practised in the Government mints. The author is Mr. Jevons, who lately held the position of gold-assayer in the Sydney Royal Mint. When Mr. Watts does not deal with a subject himself, he gets a writer who has made it his peculiar study to take it in hand.

Microscopic Teachings. By the HONOURABLE MRS. WARD. London: Groombridge and Sons. Price 7s. 6d.

So large a number of the readers of the CHEMIST AND DRUGGIST are practical microscopic observers, and accustomed to employ their microscopes to ascertain the purity of the drugs they dispense, that we are always desirous of keeping them, as the Americans say, well posted up in microscopic intelligence. We have much pleasure, therefore, in directing their attention to the work of Mrs. Ward, which occupies an intermediate place between the very abstruse treatises of Quekett and Beale, and the more popular smaller books which are of little real value to the practical worker.

"Microscopic Teachings" contains a very useful description of the general arrangements of the microscope, of the method of using it, and its accessory apparatus. Good and reliable directions are also given as to the best method of mounting objects; and then follow a series of chapters on the mode of exhibiting the circulation of the blood in reptiles and fishes; on animalcules, and on vegetable and animal productions, etc.

The most remarkable feature of the work is a series of coloured plates of unusual excellence. Those exhibiting the circulation in animals are of extreme beauty; the work is also abundantly supplied with woodcuts, and constitutes a most useful and elegant addition to the microscopic literature of the day.

*** We have received from Messrs. Churchill a *Toxicological Chart* by Mr. Stowe, which exhibits at one view the symptoms, treatment, and mode of detecting the various mineral, vegetable, and animal poisons; and from Dr. Odling, a valuable series of *Tables of Chemical Formulae*. These two publications are far too important to be dismissed with a few words, and, as we have little space left, we must keep our praises for our next number.



HOW'S VENTILATING PHOTOGRAPHIC TENT.

Mr. How, of Foster-lane, has recently perfected an improved form of photographic tent, which is remarkable for its lightness, portability, and extreme convenience in use.

The entire tent when packed occupies the small space of 2 feet in width, 18 inches in depth by 6 inches in thickness, and weighs only 20 pounds, not being as large or as

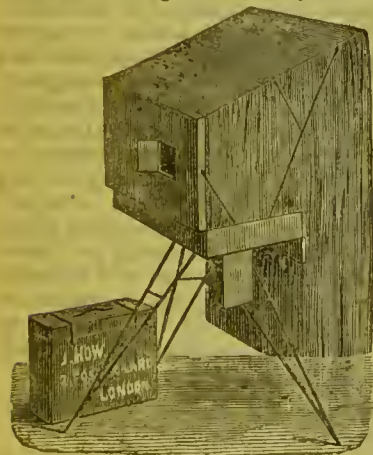


FIG. 1.

heavy as a well-filled carpet bag, which it exceeds in the convenience of carriage. When required for use the tent can be set up in less than two minutes. The lid of the case when raised forms the front of the tent; this contains a sliding window, which either admits air, white or yellow light at pleasure. The covering of the tent which is three-fold, and perfectly opaque even to the most intense sunlight, is supported at the sides by two slender forked iron rods, of the most simple yet efficient construction, which cannot get out of order with any fair amount of usage.

The interior of the tent discloses a complete photographic operating-room. Above, in front, is a shelf for the chemicals required, on the left is the nitrate bath, and there is the ample working-space of two feet in width. One great feature in the tent is the facility with which it is capable of being ventilated; the sliding window admits a current of fresh air, and as the covering is capable of being instantly thrown over the top, the whole interior is exposed as

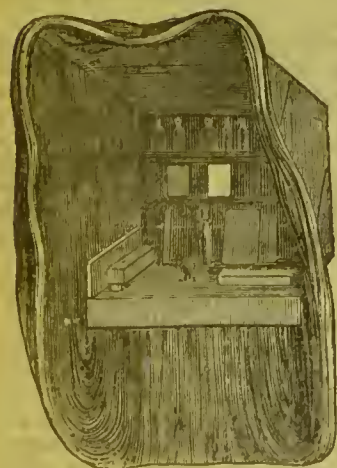


FIG. 2.

shown in Figure 2 in less than a couple of seconds; hence, its coolness compared with the hot, suffocating, close atmosphere of the older contrivances is remarkable.

The accompanying engravings illustrate the entire arrange-

ment of this cheap, efficient, and portable apparatus. Figure 1 shows the tent both when packed, and when erected on its tripod-stand for use. Figure 2, the arrangement of the interior.

We cannot imagine any more useful apparatus for all outdoor workers in photography.

GORE'S GAS FURNACES.

In the *CHEMIST AND DRUGGIST* for August, 1863, we gave a brief description of a new patent Gas Furnace by Mr. G. Gore, of Birmingham. The principle of this furnace has since been applied upon a much larger magnitude, and furnaces on a commercial scale are now in use at the electro-plate manufactory of Messrs. Elkington, Birmingham, and elsewhere. These larger furnaces as at present constructed are capable of melting about 400 ounces of silver, copper, gold, German silver, or if desirable even cast-iron. The amount of coal-gas consumed in one of these furnaces varies from 300 to 400 cubic feet per hour. With a consumption of 360 feet per hour the following results have been obtained:—266 ounces of sterling silver were perfectly melted within twenty-five minutes from the period of lighting the gas in the cold furnace, and the metal was sufficiently hot to cast for rolling in twenty minutes more. A second quantity of 266 ounces of the same metal was then introduced, and was perfectly melted in eleven minutes, with a consumption of sixty-six cubic feet of gas, value twopence, the price of gas being two shillings and eightpence per 1,000 feet; in a further period of fifteen minutes the metal was sufficiently hot to cast for rolling. A quantity (116 ounces) of German silver was then introduced and melted in fifteen minutes, and after twenty-eight minutes longer heating, various highly figured articles were cast in it in a most perfect manner.

The use of this furnace is extending rapidly, the smaller sizes being much used by dentists, jewellers, analytical chemists, assayers, enamellers, and others; in consequence of their readily fusing silver, gold, copper, glass, or even cast-iron, without the aid of a bellows or lofty chimney, by simply lighting the gas; and the crucible and its contents being at all times protected from the air, and yet perfectly accessible for examination, stirring, removal, &c. The burners of the larger sized furnaces are formed of a series of plates of cast-iron, and may be readily removed from the furnace and employed to heat a retort, muffle, reverberatory chamber, or other apparatus where intense heat is required. It is intended to apply them to the heating of steam-boilers, and welding articles of wrought-iron.

The safety of these furnaces, their regularity and self-supplying action, and perfect freedom from dust and smoke, render them advantageous in such processes as enamelling, annealing, &c., where cleanliness and uniformity of heat are required. Their high degree of heat without the aid of a blast results from the very rapid and perfect mixture of the air and gas, the combustion being consequently effected and concentrated in a very small space.

RIMMEL'S TERCENTENARY MEMORIALS.

MR. RIMMEL seems to have monopolized the speciality of producing articles of perfumery appropriate to the time and season. On one occasion it is a Perfume Vaporizer, then an Alexandra bridal fountain, at Christmas perfume crackers, and now a series of Tercentenary keepsakes, which, we pledge our reputation as prophets, will be far more popular with the customers of our subscribers than all the designs of Dixon and Co. are to those of the *Athenæum*.

THE TERCENTENARY GOLDEN LOCKET is an oval-scented charm, embossed with the face of the bard on one side, and with his coat of arms on the other.

THE BARD OF AVON'S PERFUME is a bottle in neat box, the label bearing the following appropriate quotation:—

"Like the sweet south
Breathing upon a bank of violets,
Stealing and giving odour."

THE SHAKESPEARE SACHET is a very pretty lace envelope, with a photograph of the poet.

THE SHAKESPEARE SOUVENIR is also a sachet, but is more elegant, being printed on satin; it also contains a "carte de visite" of Mr. William Shakespeare, with appropriate quotations from his works.

We should think these *articles de luxe* likely to meet the taste of the public during the Shakespearian excitement that will reach its climax during the month of April.

"VIGIL" ON THE PROPOSED NEW MEDICAL BILL.

THE following letter, mentioned in our last, was published in the columns of a contemporary more than a month ago, but we lay it before our readers to remind them of the position of parties before the Pharmaceutical Society determined to consider the expediency of doing something for the protection of the legitimate interests of chemists and druggists. :—

TO THE EDITOR OF "THE DAILY TELEGRAPH."

SIR,—In the exercise of that wise discretion which distinguishes the conduct of *The Daily Telegraph*, you admitted into your columns a letter from "A Chemist and Druggist," which has been followed by a number of others, more remarkable for the personal views and party spirit which pervade them than for any comprehensive and lucid discussion of the question at issue. Indeed, I fear it would be difficult, if not impossible, for your uninitiated readers to conceive, from anything they might gather from those letters, what that question is. It may, therefore, save some valuable time, and valuable talent too, and help the public to a right judgment upon the subject, to put it thus: "Is it right and needful for public protection against incompetent dispensers of drugs, that all chemists and druggists should be placed under the control of, and be made tributary to, the Medical Council?" Permit me, however, before I briefly touch upon the question thus fairly put, to remove some of the fallacies with which it has been encumbered.

The so-called New Medical Bill is not an authorised proposal of the Medical Council. It has not even the sanction of an unanimous Committee of that Council; but it is the production of a section of the Committee, who have been encouraged to give it publicity with the view, no doubt, to sound the public, and to feel the pulse of the patient body of chemists and druggists. It is not true that the United Society of Chemists and Druggists have any object antagonistic either to the Medical or to the Pharmaceutical Council. They simply seek to defend themselves from injustice, whilst earnestly working for such a reform of the trade as the public have a right to expect. It is not true, as stated by your correspondent "W. H.," that "the United Society of Chemists and Druggists defeated by their clamour the Sale of Poisons Bill." That is a fabrication. It is assumed that the chemists and druggists are opposed to the principle of examination. That also is not true. They not only approve of examination, but they would make that examination compulsory; and it is to be regretted that any of your correspondents should occupy the attention of your readers upon such an assumption.

It is further assumed by those who write in the interests of the Pharmaceutical Council that voluntary examination, as conducted by them, is all that is required. Twenty-two years' experience of the working of the Pharmaceutical Society has proved that to be a fallacy. Voluntary examination can do nothing to prevent incompetent persons from coming into the trade, which is the real evil. Therefore the remedy wanted is the power of a compulsory examination to prevent them. As it is, were every chemist and druggist in the kingdom to come up to London to be examined, and to carry his diploma back with him for the admiring gaze of the public, that would not prevent a legion of incompetent druggists entering the trade on the following day.

I now go to the main question—What right have the Medical Council to interfere with the chemists and druggists? None. That they themselves acknowledge. They are even pledged not to do so. They have no right upon the ground of legislative sanction. If that sanction had been given, the Legislature would, in common justice, have incorporated the trade, as the apothecaries were incorporated under similar circumstances, and given them a voice upon the Council which should govern them in common with the rest of the medical body. They have no right, even upon the ground of a community of interests; for the interests of those they represent—especially the shop-keeping doctors—is to drive every dispensing chemist from his trade. And what says equity to this proposal? Is it just that an incorporated and privileged body should have despotic power over an unincorporated and non-privileged body of 35,000 men, with their apprentices and assistants? Clearly the Medical Council have no right to the sought-for interference on the ground of public safety. The public claim to select the bank in which to deposit their money, and they will claim to choose the druggist in whose hands they will confide the issues of life and health.

They will, here in England at least, not only choose their own cheap doctor, but they will have cheap physic too. They want no privileged practitioners, but competent dispensers. Were this scheme of the doctors to become law, it would prove a monopoly. How would the poor fare under a medical despotism—the poor woman with an ailing baby in her arms, and twopenny in her pocket—the poor labourer, with rheumatism in his bones, and no work—the poor mechanic, disabled by a cut or a sprain? How, I ask, would the millions of our poor population, with their innumerable ailments, be benefited by such an arrangement? Benefited! They who have witnessed medical abuse of power, as the law now stands, will shudder to think how our virtuous and industrious masses, who are too poor to go to the doctor, and too proud to go to the dispensary, would fare if forced to seek relief from suffering at the hands of doctors by law provided.

Allow me now to invite the attention of your readers to the "Suggestions" of the Executive Committee of the United Society of Chemists and Druggists for a proposed Act of Incorporation of the trade, which I think you and they will agree is both practicable and just. It was with a praiseworthy determination to grapple with the evil which the Pharmaceutical Council have permitted to fester and swell without an effort to reduce it, that the Committee placed these suggestions before the trade in the following words:—"That the Act shall be based upon a recognition of all claimants to an interest in the trade of a chemist and druggist until six months after the passing of the said Act. That after such date it shall be incumbent upon all who enter the trade of a chemist and druggist to undergo an examination by a Board of Examiners duly appointed. That the examination shall be of the following order and kind:—1. Proof of having served an apprenticeship of not less than five years (exemption from this only to be allowed under special and well-defined conditions for otherwise securing the practical knowledge required). 2. Ability to read prescriptions with ease and accuracy. 3. A competent knowledge of all drugs in general use, with their doses." Then follow suggestions for the

working of the Act, and the expressed desire of the Committee not to interfere with the chartered privileges of the Pharmaceutical Society.

These "suggestions" were printed in the form of a circular and distributed amongst the trade six weeks before the proposed new Medical Bill appeared in the *Lancet*, and I leave your readers to judge of the animus which could dictate such a procedure, as well as of the degree of security it affords for that impartiality, prudence, and equity which should distinguish its promoters, when it is added that the Executive Committee of the United Society, so far from being consulted, were left in ignorance of the proposal until it came before the public.

Having now pointed out the evil of the trade, as generally admitted, and the remedy as suggested by the Executive Committee of the United Society of Chemists and Druggists, permit me as briefly as possible to answer the question raised by the Editor of the *Pharmaceutical Journal* in relation to the registration of the trade, in language so simple that it might induce a smile were it not for the mischievous hint which lurks beneath it. Who is to do it? The public require some security against incompetent druggists. The Legislature is of much the same opinion. The Pharmaceutical Council say, "Compel them to come to us; we will examine them." "No," say the Medical Council. "We will both examine and tax them." Were this a mere question of duty, it is much to be doubted whether either Council would care a jot about it; but there are 35,000 chemists and druggists, and possibly as many again assistants and apprentices, suggestive of an annual income of from £30,000 to £60,000.

Who is to do it? Will you, the Medical Council, do it; or shall we, the Pharmaceutical Council, do it? or shall we divide the power and the profit between us? Neither of you shall "do it," is the indignant rejoinder of the trade. The chemists and druggists of the north of England echo this as the unanimous verdict of the south; at London, Manchester, Bristol, Bath, Newcastle, Sunderland, Scarbrough, York, Leeds, Sheffield, Hull, Nottingham, Bolton, Oldham, Walsall, and many other towns, the chemists and druggists have met, and decreed and recorded that neither the Medical Council nor the Pharmaceutical Council shall reign over them.

I am, Sir, yours, &c.,

VIGIL.

MORE TRADE SWINDLING.

A SUBSCRIBER residing in Nottingham sends us a report of the examination of one Thomas Jarvis, who was brought before the magistrates charged with practising frauds in the oil trade. It appears that the prisoner in November last called on Mr. R. Wilks, a chemist, residing at Lenton, and said that his son was a manufacturer of neat's-foot oil in Derby, and being "hard up" was willing to sell at a low price. He produced a sample, which Mr. Wilks examined and found to be genuine oil. A bargain was struck. The prisoner brought ten gallons of something that closely resembled the sample, and after signing a receipt with the name of "James Wood," walked away with £2 in his pocket. Some time afterwards, Mr. Wilks discovered that the stuff he had purchased was not oil, but a factitious article, quite useless for the purposes of oil. He also discovered that "James Wood, of Parker-street, Derby," was a mythical person. Mr. Bishop, a lace manufacturer at Lenton, was also taken in by the same story and the same sample, and purchased twenty-two gallons of the factitious oil at five shillings a gallon, the usual price of neat's-foot oil being about six shillings and sixpence a gallon.

Samples of the composition were sent to Mr. Atherton, F.C.S., of Nottingham, for analysis, and this gentleman found that the greater part of each sample consisted of the vegetable jelly of Irish moss with a little colouring matter to give it the appearance of neat's-foot oil. The value of this jelly was about threepence per gallon, and that of the whole compound, which contained a small quantity of neat's-foot oil, about fivepence per gallon. The swindler was eventually caught, and at his residence in Birmingham a quantity of palm oil, the colouring ingredient of the composition, was discovered. The prisoner has been committed for trial.

We call attention to this swindler as many of our country subscribers deal in neat's-foot oil, and may be visited by the partner of Mr. Jarvis, who it appears is still at large.

MINOR USES OF GLYCERINE.—Glycerine may be employed, instead of common salt, for preserving untanned skins and hides, especially when intended for exportation, and therefore requiring rapid means of applying a preserving agent. Paste, cement, mortar, mastic, and other matters, especially when intended for daily use, may be treated with glycerine in order to keep them in a suitably damp condition: this treatment will also have the effect of preserving them from frost. Vesicatory or blister paper, lint and textile fabrics, particularly cloth, rags, and bandages intended for medical or surgical purposes, may be treated with glycerine to render them absorbent. As glycerine never freezes, and is not altered by exposure to the air, it may be advantageously applied as a lubricator for delicate machinery, such as clock-work.—*Watts's Dict. of Chemistry.*



LONDON, MARCH 15, 1864.

CORRESPONDENCE.—All communications should be addressed to the Editor, at 24, FLOW-LANE, E.C.; those intended for publication should be accompanied by the real names and addresses of the writers.

QUERIES.—The Editor cannot undertake to attend to those which are anonymous, or to send answers through the post.

SUBSCRIPTION.—The subscription to the CHEMIST AND DRUGGIST is 5s. per annum, payable in advance. Should a receipt be required, a stamped envelope must be sent with the amount of subscription. A specimen number may be had upon application, price 6d.

POST OFFICE ORDERS.—Post-Office Orders to be made payable at the General Post Office to the Publisher, JAMES FIRTH, who is alone authorized to receive accounts.

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The CHEMIST AND DRUGGIST is published on the Fifteenth of every month, and regularly supplied direct to the Members of the Trade in Great Britain, Ireland, the Colonies, and all the principal seats of foreign commerce.

THE PHARMACEUTICAL COUNCIL AND THE UNITED SOCIETY OF CHEMISTS AND DRUGGISTS.

It is with true regret that we publish the following facts bearing upon the relations of the Pharmaceutical Society with the trade generally, and deduce from them the only conclusions possible under the circumstances.

We commence with the correspondence between the Secretaries of the Pharmaceutical Society, and of the United Society of Chemists and Druggists, printed in our monthly budget of news (page 34).

It will be seen from the letters that, in accordance with the loudly-expressed wishes of the trade in various parts of the kingdom, the Executive Committee of the United Society proposed to hold a conference with the Council of the Pharmaceutical Society relative to the proposed Medical Bill. Such a conference, with combined and cordial co-operation as a result, would, we are sore, have met with the unanimous good wishes of the trade at large. The chemists and druggists who do not belong to the Pharmaceutical Society were content to believe that that Society really was at last going to work in earnest to promote the interests of the entire trade, and to aid them in fixing their commercial rights on a sure foundation. The Pharmaceutical Society had already, in an apparently disinterested manner, expressed its serious intention of defending to the utmost the liberties of the general body: what, therefore, was more natural than that the non-members of the Society should, through their official mouthpiece, desire to co-operate with them in their well-intentioned scheme? Any one with the smallest amount of common sense would have supposed that the Pharmaceutical Council would have jumped at such a proposal: instead of which, they coolly ignore the existence of the United Society, and practically deny its right to join with them in a work with which its members only can have any interest.

In an article in our last Number we expressed our firm belief that the disinterested conduct of the Pharmaceutical Council was really a trap to work harm to non-members of the Society, in spite of all the offers of help which have proceeded from them during the past three or four months, and which were so strangely at variance with their former conduct and opinions.

So far the Council has acted oddly enough; but more remains behind, and the following facts will, we think, prove to our readers that if the chemists and druggists of this

country are anxious to see their rights and liberties as citizens and traders preserved, they had better reflect before they trust their case in the hands of those who wish to arrogate to themselves special privileges.

The attentive reader of the fly-leaves in the last number of the *Pharmaceutical Journal* will have noticed that a requisition, signed by nearly 300 town and country members, was presented to the Council of the Society, requesting that a general meeting of the members might be called, "for the purpose of considering the expediency of an immediate application to Parliament for an amended Pharmacy Act, by which (following the precedent of the Apothecaries Act) *the legitimate interests of those already in business should be protected*, and proper provisions made for rendering the examinations of future chemists by your Board a compulsory instead of an optional proceeding." Accordingly a general meeting is to be held on Thursday next, March 17th, at 12 o'clock, at which, we have every reason to believe, resolutions will be passed tending to the future profit of the Pharmaceutical Society, and, possibly, to the injury of all those chemists and druggists who do not enjoy its powerful protection.

On referring to p. 386 of the same Journal, containing the report of the special meeting of the Council held to consider the requisition, we find the following short but very significant announcement:—"A memorial from Leeds, signed by forty-five members and non-members, was also presented to the Society." Our readers will, no doubt, like to know what was this memorial that was shelved in so unceremonious a manner. We, fortunately, can tell them. It contained precisely the same request as the letter of the Secretary of the United Society. Certain pharmacutists of Leeds, who must be henceforth looked upon as the only really enlightened members of their body, wished to join with their townsmen, non-members of the Pharmaceutical Society, in helping them to obtain their rights. But as soon as they presented a requisition embodying such a sentiment, it was coldly received, and they were, no doubt, set down as traitors by the magnates of Bloomsbury-square.

Now, to what conclusion can all these facts lead us? That the Pharmaceutical Council are really disinterested in taking our parts against the Medical Council? We fancy not.

First, let us ask who would be the losers supposing the proposed Bill became law? Not the pharmacutists, but the chemists and druggists. And who would be the gainers? The pharmacutists alone, and no one else. And yet these disinterested people say they are going to fight for us, and ask us to trust them, with the Jury Bill treachery fresh in our minds! Many of us, no doubt, were deceived by their soft phrases and "crocodile's tears," and believed in their friendship; but when it was put to the test what happened? The real character of our "friends" came out. They intend, it is said, to take up arms to fight our battles against *themselves*, and the Medical Council; but all union between us and them is scorned and derided, although the objects we are to fight for, and the weapons we are to use, are ostensibly identical both in letter and in spirit.

We are told that the meeting on Thursday next, in which we are to take no part, is for our good. We very much question this. Fancy a grand county meeting of foxes, to protest against the closing of poultry yards after dark, at which none of the cocks and hens were to be admitted! How the latter would praise the disinterestedness of the foxes, and believe in their truth!

In spite, however, of all the above facts, which our readers must allow are at least most suspicious, we do not despair of yet seeing a hearty and friendly union between the two Societies. The United Society can still seek to co-operate with its elder brother; and the Pharmaceutical Society may be brought to see that a body mustering nearly three thousand active members of the trade deserves to be treated with more consideration than was exhibited on the occasion to which we have referred. The requisition for convening the meeting on Thursday next definitely states that the interests of outsiders are to be specially protected in the scheme to be laid before it; and yet the Council, in a manner, ignore the existence of the very men for whom the requisitionists propose to seek improved legislation. Surely, on reflection, they must see that in refusing to co-operate with those for whose good they are going to work, they not only act most illogically, but lay themselves open to well-founded suspicions.

As the representative of a large portion of the trade, we feel ourselves called on to act as mediator in this matter. Nothing would delight us more than to see the two societies working together in a friendly spirit. In order to bring about this union, we appeal earnestly to the good sense of the liberal members of the Council of the Pharmaceutical Society. The United Society has lost nothing by having made the first advances, and though not represented at the meeting on Thursday, its power will be felt by the pharmacutists as a pressure from without not to be rashly resisted.

As soon as the results of this meeting are known, a special meeting of the chemists and druggists of London should be summoned, to which the large towns of England should be requested to send delegates. Let an acting defence committee, of not more than twelve, be chosen, and let them assemble weekly until the great question that we all have at heart is definitively settled.

SPECIAL GENERAL MEETING OF THE PHARMACEUTICAL SOCIETY.

We learn from a report, printed in the *Pharmaceutical Journal* of the present month, that the following requisition, duly signed, was submitted to the Council on the 26th ultimo:—

TO THE PRESIDENT, VICE-PRESIDENT, AND COUNCIL OF THE PHARMACEUTICAL SOCIETY OF GREAT BRITAIN.

"Gentlemen,—We, the undersigned, believing that it is highly desirable for the protection of the public that all future Chemists and Druggists should undergo a due professional examination before commencing business, hereby request you to convene a General Meeting of the Members of our Society, for the purpose of considering the expediency of an immediate application to Parliament for an amended Pharmacy Act, by which (following the precedent of the 'Apothecaries Act') the legitimate interests of those already in business should be protected, and proper provisions made for rendering the examinations of future Chemists by your Board a compulsory instead of an optional proceeding."

We also learn that the Council, in compliance with the above requisition, resolved:—

"That a special general meeting of the members of the society be held on Thursday, the 17th March, at twelve o'clock precisely, and that the notice convening the said meeting, with the names of the requisitionists, be announced in the ensuing number of the *Journal*."

The report informs us further, that "a memorial from Leeds, signed by forty-five members and non-members of the society, was also presented to the Council," but it does not tell us how this memorial differs from the other.

Believing that "the legitimate interests of those already in business" would be advanced by the publication of a full and truthful report of the meeting in the columns of the *CHEMIST AND DRUGGIST*, we caused the following note to be addressed to the Secretary of the Pharmaceutical Society:—

(COPY.)

"The Chemist and Druggist,"

24, Bow-lane, E.C.,
March 9th, 1864.

MY DEAR SIR,—As I represent the literary organ of a large body of chemists and druggists, I am necessarily deeply interested in the object of the special general meeting of the members of your society convened for the 17th of March. I shall, therefore, feel greatly obliged if you will inform me at your earliest convenience, whether I shall be permitted to attend the meeting accompanied by a reporter.

ELIAS BREMRIDGE, ESQ.,
Secretary and Registrar to the
Pharmaceutical Society of
Great Britain.

I am, my dear Sir,
Your obedient servant,
J. C. BROUGH,
Of the "Chemist and Druggist" *Journal*.

Mr. Bremridge promptly replied in the following words:—

(COPY.)

Pharmaceutical Society of Great Britain,
17, Bloomsbury-square, W.C.

DEAR SIR.—In reply to your inquiry of this day's date, I beg to inform you that the meeting advertised for the 17th instant is convened for Members of the Society, and Members ONLY can be admitted.

I am, dear Sir, your obedient servant.

J. C. BROUGH, ESQ.

ELIAS BREMRIDGE, Secretary.
March 9th, 1864.

THE NEW PHARMACOPŒIA.—The practical results of the new Pharmacopœia, so far as they concern the practitioner, seem to be marvellously few. So far as the Pharmacopœia affects the druggist, it would appear to give an immensity of trouble—to order a great many useless processes, a large number that are bad, some that are impossible, and a few that are good.—*The Lancet*.

A REVIEW OF THE BRITISH PHARMACOPŒIA.

BY J. C. BRAITHWAITE AND J. C. BROUGH.

II. NON-METALLIC ELEMENTS.

HAVING given a general description of the new Pharmacopœia, we now proceed to criticise the work in detail, and to point out the changes made in our prescribed *Materia Medica* and pharmaceutical preparations. We shall not notice the articles in alphabetical order, but shall adopt a simple scheme of classification which will bring together things that are chemically or botanically related. Thus, in the present paper, we shall discuss the alterations connected with the inorganic non-metallic chemicals of the Pharmacopœia. Throughout our review we shall make use of the simple letters L., E., D., to designate the London Pharmacopœia of 1851, the Edinburgh of 1841, and the Dublin of 1850, respectively.

OXYGEN AND HYDROGEN.

These elementary bodies are not included in the *Materia Medica*. Free hydrogen is employed in the preparation of reduced iron (*ferrum redactum*), which will be noticed in a subsequent article.

AQUA—*Water*.—Under this head we find in the *Materia Medica* the somewhat vague description—"natural water, HO, the purest that can be obtained, cleared if necessary by filtration;" with a reference to

AQUA DESTILLATA—*Distilled Water*.—We are ordered to distil ten gallons of water, free from taste and odour, from a copper still connected with a block-tin worm; to reject the first half-gallon, and to preserve the next eight gallons. In this process the directions of the Ph. E. and D. are ingeniously combined. The Ph. L. gives no process, and that now ordered will be seldom carried out, as nearly all the aqua destillata used in pharmacy is supplied by the chemical manufacturers, who obtain it by condensing the waste steam of their works. We are told that the product of the above process should not be affected by sulphuretted hydrogen, oxalate of ammonia, nitrate of silver, chloride of barium, or solution of lime, and that a fluid ounce of it when evaporated on a glass capsule should leave no visible residue. We have never succeeded in producing such distilled water by simple distillation from a copper still; and we agree with Dr. Redwood* in regarding the description given as a good illustration of the great defect of over-refinement which is noticeable in many parts of the new Pharmacopœia.

NITROGEN.

ACIDUM NITRICUM—*Nitric Acid*.— $3\text{HO}, 2\text{NO}_5$. This is correctly described as "a strongly acid and corrosive yellowish liquid" having the sp. gr. 1.5. It is, therefore, similar to the acid of the Ph. L. 1836, and the "acidum nitricum purum" of the E. and D. In adopting this strong, fuming, and unstable liquid in preference to the eligible acid of the present Ph. L., the compilers of the new Pharmacopœia have shaken our faith in the proverb which declares that "in the counsel of the many there is wisdom." The acidum nitricum of the London College, which has been in use since 1851, is a definite hydrate, having the composition $\text{HO}, \text{NO}_5 + 3\text{HO}$, and containing 60 per cent. of dry acid, or nitric anhydride (NO_5). It is easily obtained as a colourless liquid, having the sp. gr. 1.42, and it may be preserved without difficulty; for, unlike the stronger acid now re-introduced, it does not deteriorate by exposure to light. It is, in fact, so stable that it may even be distilled without undergoing decomposition. Weaker and stronger acids are alike reduced to this state of hydration by boiling, the weaker acids losing water, and the stronger acids NO_5 . The introduction of this liquid, so well adapted for medicinal use, into the Ph. L. in place of the stronger acid of 1836, was a decided improvement. There seems to be no excuse for the backward step now taken by the Medical Council; for Dr. Garrod,† regarding the alteration from a medical point of view, declares that it is of little or no importance, as the difference in causticity is not very appreciable.

* *Lancet*, February 27, 1864.

† *Medical Times and Gazette*, January 30, 1864.

ACIDUM NITRICUM DILUTUM.—*Dilute Nitric Acid*.—This has the sp. gr. 1.101, and is consequently stronger than the dilute acids of the L., E., and D., the sp. gr. of which are 1.082, 1.077, and 1.092 respectively. Six fluid drachms of the new dilute acid contains one equivalent of NO_5 in grains. We may here mention that the dilute nitric sulphuric and hydrochloric acids have been made to correspond very nearly in strength or neutralizing power, in order that the doses may be alike.

LIQUOR AMMONIÆ FORTIOR.—*Strong Solution of Ammonia*.—Here, again, we find an unnecessary alteration in strength, the specific gravities of the new and old solutions being as follows:—Ph. Brit., 0.891; L., 0.882; E., 0.880; D., 0.900. We may remind our readers that in the case of solution of ammonia the sp. gr. decreases as the strength increases. The process given for preparing liquor ammoniæ fortior is a good one, but might have been described with half the number of words used. No process given in Ph. L.

LIQUOR AMMONIÆ.—*Solution of Ammonia*.—Prepared by diluting one pint of the strong solution of ammonia with two pints of distilled water. Its sp. gr. is 0.959, which differs very slightly from that of the L. and E. solutions (0.960), and considerably from that of the D. solution (0.950).

LINIMENTUM AMMONIÆ.—*Liniment of Ammonia*.—In this preparation, as in many others, the Ph.D. has been followed in preference to the L. It contains 1 fl. oz. solution of ammonia to 3 fl. oz. olive oil, and is therefore weaker than the L. liniment.

SULPHUR.

SULPHUR SUBLIMATUM.—*Sublimed Sulphur*.—This is well described with its tests in the Mat. Med. The name is new, replacing the simple "sulphur," L., E., D.

SULPHUR PRÆCIPITATUM.—*Precipitated Sulphur*.—A long but effective process for making this from sublimed sulphur, lime, and hydrochloric acid, is introduced in place of the brief definition given in the Mat. Med. of the Ph.L.—"Milk of sulphur: precipitated from sulphuret of calcium by hydrochloric acid." The *Lancet*† states that the great bulk of precipitated sulphur found in the shops consists chiefly of sulphate of lime, in consequence of sulphuric acid being employed to throw down the sulphur, and recommends its readers to pay great attention to the Pharmacopœial test—that "it is entirely volatilized by heat."

CONFECTIO SULPHURIS.—*Confection of Sulphur*.—This is a modification of a preparation of the same name in the Ph.D. It is made from sublimed sulphur, 4 oz., and acid tartrate of potash, 1 oz., rubbed up with syrup of orange peel, 4 fl. oz. There is no corresponding preparation in L. or E., and we think that it has been justly stigmatized as "frivolous and empirical."‡

UNGUENTUM SULPHURIS.—*Ointment of Sulphur*.—Similar to that of E. and D., but only half the strength of the L. ointment. The compilers of the new work appear to have regarded the formula of the London College with little favour.

ACIDUM SULPHUROSUM.—*Sulphurous Acid*.—This acid, which is said to be a valuable external agent in the treatment of those skin diseases connected with the growth of vegetable parasites,§ appears for the first time in the Pharmacopœia. It is described as "sulphurous acid, SO_2 , dissolved in water," and obtained by deoxidating sulphuric acid by boiling it with wood-charcoal, and saturating distilled water with the evolved gas. It is very liable to decomposition.

ACIDUM SULPHURICUM.—*Sulphuric Acid*.—This is correctly described in the Mat. Med. as "monohydrated sulphuric acid, HO, SO_3 ," having the sp. gr. 1.846. In strength, therefore, this acid corresponds or approximates to ordinary oil of vitriol (sp. gr. 1.84 to 1.85), to the acidum sulphuricum of the Ph.L. (sp. gr. 1.843), and to the acidum sulphuricum purum of E. and D. (sp. gr. 1.845 and 1.846). It must not be supposed, however, that the Medical Council prescribe ordinary oil of vitriol. The new acidum sulphuricum is obtained from the commercial article by a process which is thus described:—

"Take of sulphuric acid of commerce, twelve fluid ounces; sulphate of ammonia, in powder, a quarter of an ounce.

Having added the sulphate of ammonia to the sulphuric acid, introduce the mixture into a plain retort with a few slips of platinum foil, cover the upper part of the body of the retort with a sheet-iron hood, and distil over one-tenth of the acid into a flask. Remove this flask, and reject its contents; and having applied a fresh flask, continue the distillation till only a fluid ounce of liquid remains behind. Preserve the product in a stoppered bottle."

This process, so smoothly described, is a most troublesome one, and altogether unsuited for a pharmaceutical laboratory. If the "plain retort" ordered to be used be a glass one, the distillation will be attended with considerable danger. The vapour of oil of vitriol has a very small latent heat, and under the most favourable circumstances the ebullition of the acid is intermittent. The slips of platinum foil will moderate to a certain extent the violent "bumping" of the liquid, but their presence will not render the operation an easy one. At the principal oil of vitriol works, platinum stills are now employed for effecting the concentration of the acid produced in the lead chambers. These are very costly, but are found to be cheaper in the long-run than glass retorts, which are always breaking. Yet the vessels of the manufacturers are not used for distilling strong oil of vitriol, but merely for distilling off the dilute acid until the requisite concentration is attained. When the practical chemist is forced to employ a glass retort for distilling sulphuric acid, he carefully screens the bottom from the fire, and applies heat only at the sides. This precaution, which is not noticed in the Pharmacopœial process, greatly diminishes the danger from percussive ebullition. But, though too troublesome to be carried out on a small scale, the process of the British Pharmacopœia is decidedly a good one in principle, and provided the commercial oil of vitriol be free from arsenic (see below) the product will be pure monohydrated sulphuric acid of the sp. gr. 1.846. The addition of the sulphate of ammonia insures the removal of nitrous and nitric acids, while the rejection of the first tenth of the distilled acid insures the proper strength of the remainder.

Dr. Redwood, in a lecture delivered before the members of the Pharmaceutical Society,* pointed out the practical difficulties of the process, and indirectly accused the chemists of the Pharmacopœia of gross ignorance. Unfortunately for Dr. Redwood, his criticism was based on misconceptions, and the medical chemists will doubtless make good use of the startling statements advanced by the Professor of Chemistry to the Pharmaceutical Society.

"It may be asked," said Dr. Redwood, "by some of our brethren who have not just issued from the laboratory of this or some other institution—what does monohydrated sulphuric acid mean, and what is the body represented by the formula HO, SO_3 ?" If the students are not forced to adopt the Professor's peculiar views respecting the chemical constitution of oil of vitriol, those present must have been rather puzzled when the lecturer continued,—"Will the product described as monohydrated sulphuric acid realize this description when obtained by the process given? I venture to say that it will not. It will not be monohydrated sulphuric acid; and this is perhaps a fortunate circumstance, for monohydrated sulphuric acid would not be well suited for use in pharmacy. It is an acid which congeals in cold weather, as glacial acetic acid does; and the use of such an acid would be attended with much inconvenience. We are afforded a means of escape from this dilemma, it is true; for, after stating that the sulphuric acid to be used in medicine is to be the monohydrated acid, the description goes on to say that it is to have a specific gravity of 1.846. Now, this is the specific gravity of an acid weaker than the monohydrated acid."

We venture to deny all that the Professor of Chemistry and Pharmacy affirmed. The product of the Pharmacopœial process will be monohydrated sulphuric acid, or HO, SO_3 ; an acid well suited for use in pharmacy, not liable to congeal in cold weather, and having the specific gravity of 1.846.

The surmise that Dr. Redwood mistook the monohydrate for the bihydrate will enable us to understand some of his peculiar views. Let us compare these two hydrates of sulphuric acid:—

Monohydrate (British oil of vitriol): HO, SO_3 , sp. gr. 1.846.
Bihydrate (Glacial sulphuric acid): $2\text{HO}, \text{SO}_3$, sp. gr. 1.78.

* "Stronger solution of ammonia" would have been a better English name for "liq. ammon. fortior."
† March 5.

‡ "First Impressions of the Brit. Ph.," in *Med. Times*, Feb. 6.

§ Dr. Garrod in *Med. Times and Gaz.*, January 30, 1864.

* Reported in *Lancet*, Feb. 27, 1864.

The glacial acid, which congeals in cold weather, contains 2 equivalents of water, and has a sp. gr. of 1.78; yet Dr. Redwood describes this as the monohydrated acid, and boldly affirms that 1.846 is the sp. gr. of an acid *weaker* than the monohydrated acid.* Besides the specific gravity and liability to congeal, there is another character which distinguishes the bihydrate from the monohydrate:—on being boiled, it gives off weak acid vapour and is converted into the monohydrate; while this, on the contrary, may be distilled without undergoing decomposition. The oil of vitriol of commerce is the monohydrated acid, but, being very hygroscopic, it usually contains a little water besides that essential to it, and this has the effect of slightly lowering its specific gravity. By the process of the British Pharmacopœia, this accidental water is removed, with other impurities; but the chemical constitution of the acid is not altered. The mysterious "monohydrated sulphuric acid" of the Pharmacopœia, which has led Dr. Redwood astray, is therefore nothing but pure oil of vitriol. We have devoted considerable space to this matter; for the Professor's strictures on the new Pharmacopœia were in the main so just, that his inexplicable misstatements respecting the prescribed sulphuric acid have doubtless been accepted by many without examination.

The *Sulphuric Acid of Commerce* (Oil of Vitriol), described in the Appendix, is to be tested for arsenic by Marsh's test before it is used for pharmaceutical purposes; and if the well-known arsenical stain is formed, it is to be rejected. Now, as common oil of vitriol generally contains arsenic, it is much to be regretted that the process of purification given in the Pharmacopœia did not provide for the removal of this metal. The direction to employ a commercial acid free from arsenic reminds us of that famous injunction of Mrs. Glasse—"First catch your hare!" †

ACIDUM SULPHURICUM DILUTUM—Dilute Sulphuric Acid.—This has the sp. gr. 1.087, and is, therefore, weaker than that of the Ph. L. (1.103), but closely resembles the acids of E. and D. (1.090 and 1.084). Like the acidum nitricum dilutum, six fluid drachms contain one equivalent of anhydrous acid in grains.

ACIDUM SULPHURICUM AROMATICUM—Aromatic Sulphuric Acid.—Similar to the preparations of the Ph. E. and D., but somewhat weaker. Not in L.

Sulphuretted Hydrogen—H.S.—The ordinary method of preparing this gas from sulphuret of iron and oil of vitriol is described.

There is no preparation corresponding to the *sulphuris iodidum*, L., or *sulphur iodatum*, D.

CHLORINE.

Though this element is not included in the *Materia Medica*, the Greek scholars of the Medical Council have thought fit to alter its Latin name from "Chlorinium" to "Chlorum;" hence we have now "*liquor chlori*" instead of "*liquor chlorinii*," "*calx chlorata*" instead of "*calx chlorinata*," &c.

LIQUOR CHLORI—Solution of Chlorine.—The process given for this preparation is copied from that of the Ph. D., the only alteration being the adoption of a larger quantity of water to be saturated with the gas, 34 instead of 24 fluid ounces being taken. The process is decidedly an improvement upon that in the Appendix of the Ph. L., but the quantity of hydrochloric acid ordered (six fluid ounces) is unnecessarily large. What is now "*Liquor Chlori*" in Part II., and "*Chlori Liquor*" in the Mat. Med., was "*Liquor Chlorinii*" in Ph. L. and D., and "*Aqua Chlorinci*" in E.

ACIDUM HYDROCHLORICUM—Hydrochloric Acid.—This has the same strength as "*acidum muriaticum purum*" Ph. E. and D. (sp. gr. 1.17), and is rather stronger than the acid noticed in the Mat. Med. Ph. L. (sp. gr. 1.16). The process now given is similar to that of D.; but one essential point is left unnoticed, and if the directions given be strictly followed

no hydrochloric acid will be produced. The sulphuric acid being employed in a greatly diluted state, will not decompose the chloride of sodium unless aided by heat; but though all minor details of manipulation are fully described, there is not a word about the application of heat to the flask. This careless omission is to be regretted, as the process (when heat is applied) is an excellent one, yielding a very pure product. No process given in Ph. L.

The *Hydrochloric Acid of Commerce* is named in the Appendix among articles employed in the preparation of medicines.

ACIDUM HYDROCHLORICUM DILUTUM—Dilute Hydrochloric Acid.—The specific gravities of the new and old forms of this dilute acid are as follows:—Brit. and E., 1.050; L., 1.043; D., 1.045. For all practical purposes the new acid may be regarded as equal in strength to the dilute nitric and sulphuric acids.

ACIDUM NITRO-HYDROCHLORICUM DILUTUM—Dilute Nitro-hydrochloric Acid.—This is a new introduction. To prepare it, we are ordered to add to 26 fl. oz. of water, first 2 fl. oz. of nitric acid, and then 4 fl. oz. of hydrochloric acid. By thus diluting the nitric acid before mixing it with the hydrochloric acid, their decomposition is avoided, but the mixture cannot have the properties of ordinary aqua regia. The "*Acidum Nitro-muriaticum*" Ph. D. is not represented in the new Pharmacopœia.

BROMINE.

This element does not appear in the body of the work; but we are told by Dr. Garrod* that had it been introduced, it would have been termed "*BROMUM*," not "*Brominium*," as on a former occasion.

Bromine, though not a medicinal body, has found its way into the Appendix as an article employed in the preparation of medicines, and directions for preserving it and for testing its purity are given. A formula for *Solution of Bromine* is given in Appendix B. II. among Test Solutions for Qualitative Analysis.

IODINE.

IODUM—Iodine.—The process given for purifying the *Iodine of Commerce* (named in the Appendix) by sublimation is copied from that of the Ph. D. for "*Iodinium purum*." The "colourless acicular prisms of pungent odour" referred to as an occasional impurity of the sublimed product consist of cyanide of iodine. The pharmaceutical name has been changed from "*Iodinium*," L., E., D. Besides the iodine of commerce, the Appendix contains a *Volumetric Solution of Iodine*, employed for determining the amount of sulphuretted hydrogen or of a metallic sulphuret in a fluid, also for the estimation of sulphurous and arsenious acids.

LINIMENTUM IODI—Liniment of Iodine.—This is a useful addition to the class of liniments. It is prepared by dissolving 1½ oz. of iodine and ½ oz. of iodide of potassium in 5 fl. oz. of rectified spirit. It is a very powerful counter-irritant.

TINCTURA IODI—Tincture of Iodine.—New name for "*Tinctura Iodinii Comp.*" L. and D. It contains the old quantity of iodine, but only one-fourth the quantity of iodide of potassium. *Tinctura Iodinci*, E., is omitted, and, according to Dr. Nevins,† there is nothing which practically resembles it in the new work.

UNGUENTUM IODI COMPOSITUM—Compound Ointment of Iodine.—Resembles the unguentum iodinii comp.—L., except in the proportion of iodide of potassium, which is decreased by one-half.

PHOSPHORUS.

This element is named in the Appendix as an article employed in the preparation of medicines. To test its purity, we may ascertain whether it is "entirely soluble in boiling oil of turpentine," if we are fond of dangerous experiments. The brief description of phosphorus in the Mat. Med. of the Ph. L. might have been allowed to stand in the place of this unnecessary test.

ACIDUM PHOSPHORICUM DILUTUM—Dilute Phosphoric Acid.—This is described as "phosphoric acid, 3HIO,PO₆, dissolved in water," and, as prepared by the process given, it is considerably stronger than the L. acid, their specific gravities being 1.080 and 1.064 respectively. The process is a slight

* If we adopt the Unitary System, and regard acids as "salts of hydrogen," then we may call the glacial acid a "prohydrate" or "monohydrate;" but its formula will correspond with the 2HO,SO₃ of the common system of notation. Under no system does the formula HIO,SO₃ express an acid which congeals in cold weather, as glacial acetic acid does. The monohydrated sulphuric acid, to which this formula is correctly ascribed in the Pharmacopœia, does not solidify until cooled to the temperature of—29° Fahr. or thereabouts—sixty-one degrees below the freezing point of water.

† An elaborate paper On the Purification of Arseniferous Sulphuric Acid appears in the *Chemical News*, Feb. 13.

* *Medical Times and Gazette*, Feb. 6, 1864.

† *Prescriber's Analysis of the Brit. Ph.*, p. 66.

modification of the old one, and depends upon the reaction of phosphorus with nitric acid, the former being oxidated at the expense of the latter. Instead of using a retort, and returning the first portion of the distilled liquid as ordered, we prefer to employ a flask, into the neck of which is inserted a simple condenser, consisting of two glass funnels placed mouth to mouth. The *Lancet** recommends a similar modification of the process:—"If the nozzle of the retort is turned up and the small end of the Liebig condenser inserted into it, all the nitric acid which condenses runs back into the retort, and the process is completed in less time."

CARRON.

CARBO ANIMALIS PURIFICATUS—Purified Animal Charcoal.—The "charcoal prepared from bullock's blood by fire," described in the *Mat. Med. Ph. L.*, has been banished to the limbo of obsolete messes, and "bone black, deprived of its earthy salts," takes its place. The process is a good one, combining both the E. and D. formulæ. We have lately examined several specimens of carbo animal. pur. supplied by wholesale houses of good standing, which contained large quantities of phosphate of lime, and furnished abundant evidence of the presence of chlorides.

Bone Black is noticed in the Appendix. It corresponds to the "carbo animalis" E. and D.

CARBO LIGNI—Wood Charcoal.—This holds its place in the *Mat. Med.*

CATAPLASMA CARBONIS—Charcoal Poultice.—Same as that of L. Not in E. and D.

CYANOGEN.

We find it advisable to include this radicle C_2N among the inorganic bodies, although it is generally placed in the organic department of chemistry. The only compound of cyanogen with a non-metallic element included in the *Pharmacopœia* is

ACIDUM HYDROCYANICUM DILUTUM—Dilute Hydrocyanic Acid.—This is described as "hydrocyanic acid, HC_2N , dissolved in water, and constituting 2 per cent. of the solution." It corresponds in strength with the acidum hydrocyanicum dilutum, L. and "contains rather more than half as much anhydrous acid as acidum hydrocyanicum, E." The strength of the acidum hydrocyanicum dilutum, D., varies, but it ought to be very nearly that of the L. preparation. The want of uniformity in the three acids has been the cause of much accidental poisoning, and the Medical Council have acted wisely in banishing the strong acid of the Ph. E. and the variable acid of the Ph. D. from our national *Materia Medica*. The *Lancet*† thinks that it would have been better to have discarded the poison altogether, and declares that more lives have been lost than saved by its use. The process for preparing the dilute acid is a good one, being a slight modification of that of the Ph. L. The test for strength is the extremely delicate volumetric method of estimating cyanogen devised by Liebig, which depends on the formation of a double cyanide of silver and sodium.

In our next paper we shall notice alkaline salts, and the new or altered preparations containing them.



THE PHARMACEUTICAL SOCIETY AND THE TRADE.

TO THE EDITOR OF THE CHEMIST AND DRUGGIST.

Westminster, March 9th, 1864.

SIR,—For the past twelve months there has been a proposition before the trade for a General Act of Incorporation, and I think I may add, that with the exception of the compulsory apprenticeship clause (which I understand is now withdrawn) it has met with general approval. I am now informed that the Pharmaceutical Society's Council, having been invited by the Executive Committee of the United Society, from whom the proposition emanated, to co-operate with it in carrying out the same, has refused, in consequence of its intention to "propose an Amendment to the Pharmacy Act, which, it thinks, will respect existing interests, and meet with general approval."

It would, perhaps, be premature to raise objections to this new project before being acquainted with its details, but we ought to look with very great suspicion on any scheme for advancing the interests of "outsiders" that may be desired by a Society which, until the last few weeks, has offered a most determined opposition to everything tending to elevate the trade generally, and place all chemists and druggists on an equal footing.

* January 23, 1864.

† January 23, 1864.

The energetic measures taken by the United Society, and your admirable advocacy of general trade interests, have compelled the Pharmaceutical Council, for its very existence, to make pretence of caring for the outsiders. Had it been left alone, the Pharmaceutical Society, instead of now acting for the whole trade, would have been assisting the Medical Council in enforcing its tyrannical measure. Through the United Society alone will the trade be incorporated; for had it not been for its existence the trade would have been powerless. The question then truly is, "Who is to do it?" It is for the trade to reply. The majority, in their apathy, answer—"We care not, provided that it is done. It matters not by whom." But it does matter! The Pharmaceutical Society will meet the case, by doing as little for the outsiders as is safe, on account of the special privileges it wishes to retain for its own members. The United Society offers, by its proposed Act, a complete system of self-government. Every district would have its own examining Board, and its share in the disposal of its funds. There would, in fine, be an end to monopoly and exclusiveness. Let not the members of the trade deceive themselves. Let them avail themselves of the opportunity for effecting a grand reform. The Pharmaceutical Society will take them in, not as Pharmacists, but as *Registered Chemists*, and will compel all afterwards to pass the *Society's Examination*; consequently we shall soon get into the same condition as of old.

The United Society came forward as champion of the whole body of chemists, and has given undoubted proof of its honesty of purpose. Why has the Pharmaceutical Council refused the offer of co-operation on, which the former by the advice and request of its members made, to carry out an act which would have been for the good of all? Because it is not earnest, but desires reserved privileges for its own members.

No Act will be complete which does not give equal commercial rights to all, and that will never be obtained by the Pharmaceutical Council as at present constituted. No Bill should be accepted but that which establishes the government of the trade on a broad basis by its own members, and such an Act the United Society has prepared.

The Pharmaceutical Society was formed for the improvement of Chemistry and Pharmacy, and, as an educational organization, it deserves to be warmly supported; but, to properly carry out its legitimate duties, it should not burden itself with the immense labour of trade matters. The United Society is now strongly organized, and in every way adapted to regulate the concerns of business. It deserves the gratitude of the whole trade for what it has already accomplished, and should be supported by all in its endeavours to carry out its liberal, free-trade policy, and to obtain such an Act as will be practical and efficacious.

I am, Sir, yours, etc.

AN OUTSIDER.

TO THE EDITOR OF THE CHEMIST AND DRUGGIST.

Hull, February 25, 1864.

SIR,—The Pharmaceutical Journalist, in his February leader, assumes towards the chemists and druggists a very patronizing tone. I really cannot read his article on the proposed Medical Bill without being forcibly reminded of the three tailors in Tooley-street, who commenced their address to the throne with "We, the people of England." From his language and bearing, I should be led to suppose that he imagines himself the representative of those many thousand chemists and druggists who are not members, rather than of the mere figment consisting of two thousand who are members of the Pharmaceutical Society. We have not assisted the Society with one shilling of our money: we have not recommended our assistants or apprentices to join, because we could not see that the Society offered a "quid pro quo," and therefore we do not call loudly for its aid. The only reply we make to all its magnanimous offers of assistance is the reply of Diogenes to Alexander the Great:—"Only get out of our sunlight and you will confer upon us the greatest possible benefit. We ask no help, only offer us no obstruction." We have been repeatedly referred by this consistent journalist to the Apothecaries Act of 1815, as the best specimen of the just and equitable regard for existing interests which we may expect from our Legislature. If so, then we have a right to expect that in any bill passing the House of Parliament this or any other session, there will be a full recognition of the right of every one claiming to be a chemist and druggist, although he may be at the same time only a grocer, oilman, or chandler's-shop keeper, selling Epsom salts and sulphur. There was in the Act of 1815 a due regard for the rights of every man who claimed to be in practice at that time, and although all his educational qualification had been obtained in the stable or at the forge, his claims were recognised, and he was entitled to and allowed all the privileges and immunities of the most intellectual and educated of his contemporaries. My acquaintance with the drug trade commenced in the year 1820, and I have in the course of my experience met with numbers of practitioners who were quite as much disqualified, educationally, for the profession and practice of the healing art as the grocer, oilman and chandler's-shop keeper of our day would be for conducting a chemist's shop. I have had the honour of training gentlemen who are now conducting business as respectably and successfully as any member of the Pharmaceutical Society. I am Sir, your obedient servant,

PHILADELPHUS.

THE PHYSICIANS AND THE CHEMISTS.

TO THE EDITOR OF THE CHEMIST AND DRUGGIST.

March 7, 1864.

SIR,—At the commencement of the present century some leading members of the College of Physicians promoted the establishment of one of the first of those chemists' shops in which the business of making up prescriptions was carried on. They set up the dispensing chemist in opposition to the apothecary, whom they had good reason to distrust. They distrusted him because the medicines he kept in his so-called "surgery" were not always to be depended upon, and because he often endeavoured to displace the practitioner of superior rank by boasting of his own skill. Thus, the business of dispensing fell into the hands of the Paytherns, the Bells, and the Fishers, and the predecessors of the present generation of educated and practical chemists and druggists. Now, after half a century, during which they have been steadily advancing along the path of intellectual progress, the chemists and druggists are to be put down by the very class they were meant to supersede as dispensers of medicine. The Bill of the Medical Council, if it ever becomes law, will, in fact, bring back that state of things which the higher classes of the medical profession found so vexatious.

Yours truly,

AN OLD DISPENSING CHEMIST.

AN EARNEST APPEAL.

TO THE EDITOR OF THE CHEMIST AND DRUGGIST.

St. John's Wood, February.

SIR,—Through the medium of your Journal, I beg to caution my brother chemists against fostering a false security. Unjust and unwarrantable as we know this attack of the Medical Council to be, it may not appear so in the eyes of members of the House of Lords and Commons. Let us all remember our very existence as chemists depends on our energy. Now we must have no outsiders. Let all obey the call and join the United Society. Parliamentary conflicts cost money, then let us see that the Executive Committee have ample funds; I will willingly give my £1, and let every chemist forthwith do likewise, and we shall have a large sum at our disposal. Let us claim an Act of Incorporation for ourselves, based upon a recognition of existing interests, and show the Medical Council and the world we can and will have self government. Let us not procrastinate and leave things to take their chance, or we shall find all the dreams of prosperity nothing but dreams, and see all the hopes of success so confidently cherished, vanish like the baseless fabric of a vision, to discover too late that we have been victims from our own inertness. Let every chemist enter the field of action, and do his duty, and the victory is ours. Let every chemist finally remember that "the hand of the diligent shall bear rule, but the slothful shall be under tribute."

A MEMBER OF THE UNITED SOCIETY.

THE PROPOSED MEDICAL BILL AS AFFECTING THE POOR.

TO THE EDITOR OF THE CHEMIST AND DRUGGIST.

Bristol, February 15th, 1864.

SIR—I felt very much obliged to you for forwarding me your last number, which has induced me to become a future subscriber, and also to enrol myself as a member of the "United Society of Chemists and Druggists." From the statements contained in your last, I am strongly of opinion that it is of vital consequence to the interest of all chemists and druggists that they should speedily unite in organising a powerful opposition to the proposed new Medical Bill, by which their interests are so seriously threatened.

I will remark, in the first place, on the intended clause for preventing chemists prescribing across the counter, as is at present their practice in simple cases. Such a restriction could only be justified on one of two grounds, viz.—either first that it is a matter of justice in favour of the interests of medical men; or secondly, that such a restriction would act beneficially to the public. On reflection, it will be apparent that neither of these propositions is correct. With regard to the first, the great body of medical men at present engross not only the profits of their own legitimate profession,—that of prescribing for and attending patients,—but also grasp at those of the hapless chemist, by competing with him in the sale of medicines, which they dispense at a large profit to their own patients. Can they complain, therefore, if the chemist, in his humble attempt to live, having his own business taken from him by medical men (in articles necessarily of very limited consumption), should, in simple cases, prescribe across the counter for those who apply to him? Medical men will find it quite vain to force the public by any legislation to call them in, and to pay their expensive charges in every case of simple ailment. If the chemist is prohibited from prescribing, the public will prescribe for themselves, and that, as every chemist knows, often most injuriously.

With regard to this second point, whether it is for the interest of the public or not that the chemist should be allowed to practice counter-prescribing in simple cases (he is not likely to do so in serious ones for the sake of his own responsibility, and from being not allowed to visit), I think it is quite evident that it is a great boon to the poor to be allowed the opportunity of procuring cheap remedies, which they are likely to make use of in time from those who must necessarily have some knowledge of the nature and properties of medicines, and of the manner of prescribing them; instead of being obliged to resort either to their own oftentimes most improper remedies, or being tempted to delay on account of the expense of calling in any medical aid until it is too late, and disease has fastened an irresistible hold upon the system. How highly beneficial to children does a simple alternative mercurial powder prescribed by a chemist prove, in warding off attacks of fever, and in correcting the numerous disarrangements to which their systems are liable! The poor can at present procure such a remedy, without any fatal delay on account of the expense of calling in a doctor, for the sum of 1d. or 1½d., and this generally proves perfectly effectual. The same applies in a great measure to adults. If the case is a serious one, or does not at once yield to the remedy administered, every respectable chemist refers the applicant to a medical man. I feel quite convinced that the poor would feel it a cruel hardship to be deprived of their present cheap, accessible, and timely remedies. The Medical Council's measure if carried will have the effect in a great measure of delivering the public, bound hand and foot, over to the tender mercies of medical men. If people can afford to pay doctors' bills, they may then have a chance of living; if not, they must be left to die. There is a very large class of labouring poor, living by their own independent exertions, unable to pay for a medical man's attendance, who would feel it a great disgrace to pauperise themselves by applying for the aid of the parish doctor, and would delay doing so till too late. I only wish the poor had the opportunity of speaking out their own minds on the subject, and that such may be afforded them is one of the objects of the present letter.

I will only notice very briefly a second point in the proposed Bill: viz., the examination proposed to be submitted to by those who are at present carrying on the business of chemist and druggist. This would act as a great hardship and injustice to many who now conduct their business with credit to themselves and satisfaction to the public, but who may not be possessed of the scientific or theoretic knowledge required to pass a pharmaceutical examination, and who entered into business without being aware that such would be required of them. I hope, therefore, the United Society, whatever may be the legislation with regard to the future, will be strenuous in their protection of existing interests.

As the gentlemen who will be called upon to legislate upon the proposed Bill are those to whom it is no object to have a cheap timely aid from the chemist, and would, therefore, naturally be opposed to the idea, I earnestly urge all chemists and druggists to unite while there is yet time in offering a determined opposition to the present Bill. In a few weeks it will be too late, and their interests will be sacrificed beyond

remedy. Let not the large number of Pharmaceutical Chemists, who by payment without examination are members of the Society, think that they are safe under the shelteringegis of the Society; Government will see no qualification in such a payment, and it would not be just to their fellows that they should be privileged on that account. My recommendation, therefore, to the General Secretary of our own body (the United Society), as well as to that of the Pharmaceutical Society, is that they should each, at once, correspond with their own local secretaries in every principal town, recommending that the members of the Society be called together, that such an organisation be immediately adopted as may be thought desirable, that the Parliamentary members be memorialized on the subject, and also a petition be handed to them for presentation to Parliament signed by the members of the trade. I would also advise that the poor be allowed the opportunity of expressing their views upon the subject, and that bills be posted about each town explaining the proposed restriction to be adopted, and inviting such as do not wish their present privilege of cheap remedies to be taken from them, to sign a petition to Parliament on the subject, exposed in some public place for the purpose. This would have overwhelming weight with our aristocratic legislators.

In conclusion, as most of the local secretaries are themselves in business, and cannot afford to leave their own affairs without remuneration, I propose, during the present very critical period in the interests of the trade (affecting the very existence of many members of it), that each local secretary be liberally paid for his time and exertions, and to defray this expense an appeal be made in your Journal, and that of any necessary measures to be taken in opposing the objectionable clauses of the Bill. A subscription of a few shillings from each member (there being only one secretary in each place) would at least supply the Society with the services of its most able and recognized officers, who would then be at leisure to adopt such measures as may be deemed most effectual.

I am, Sir, with the highest respect, yours,

CHEMIST.

P.S.—I shall have much pleasure in giving £1 to any Defence Fund that may be set on foot for opposing the Bill in Parliament.

TO THE EDITOR OF THE CHEMIST AND DRUGGIST.

The Dispensary, Rye, March 2nd, 1864.

SIR,—Some time since I communicated with our worthy W.P., acquainting him of the proposed Medical Bill. In reply to which he invited me to write him more explicitly on the assembling of Parliament. I have done so, enclosing him some extracts from the CHEMIST AND DRUGGIST. I have received his acknowledgment, stating with his usual liberality his readiness to devote his consideration to so deservedly serious a subject, and that he would use his endeavours to prevent any illegal invasion of our rights, (or tantamount to this effect).

I am Sir, yours obediently,

A. W. SMITH.

P.S. I am somewhat surprised the Executive do not suggest some preliminary steps that every chemist might take to begin with, although I am quite sure they are working everything right for us.



BRITISH PHARMACOPEIA.

R. D. (Whitby). The properties and doses were not given in the London Pharmacopœia. Mr. Squire's "Companion to the British Pharmacopœia" was referred to in our last number. It is not yet published, but Mr. Squire's previous compilations lead us to expect a thoroughly practical and well digested work. According to the advertisement, it will give the strength of the preparations as compared with the L. E. and D. Pharmacopœias, the doses and properties of medicines, and hints for the best mode of administering them.

J. P. S. (Castletown, Isle of Man), writes:—"May I be so profane as to inquire whether the Solons constituting the Medical Council are a conclave of old women? I have glanced at the new Pharmacopœia, and cannot help thinking that it must have emanated from such a conclave."

W. B. H. (Sunderland) writes concerning the unfortunate work:—"There can scarcely be two opinions with respect to the omission of the 'medical uses and doses' of the medicines; and whoever this defect may be intended to injure, annoy, or inconvenience, it certainly reflects no credit on the authors, and will recoil on the members of the profession from whom the work emanates."

A Voice from Liverpool stigmatizes the Brit. Pharm. as "a work ill adapted to meet the requirements of the present age," and calls attention to its general defects. We wish we could find space for the earnest words which this "voice" devotes to the great trade desideratum—Incorporation.

A Disappointed Assistant (Coleford).—1. We did not expect to see "Tinet. Rhei Alkalina" in the Brit. Pharm. A formula is given in Beasley's Druggist's Receipt Book, which you have probably got under the head of "Brandish's Alkaline Tinet. of Rhubarb." There is no corresponding preparation in the pharmacopœias, L. E. D. 2. Many London chemists continue to dispense the preparations of the Ph.

L., except when the prescription orders those of the Brit. Ph. In the ease mentioned it would be better to adopt this plan. 3. We agree with you in thinking that the doses ought to have been given, but we beg to remind you that they were not noticed in the authorized edition of the Ph. L. Dr. Nevins has prepared a little book (reviewed in our present number) which gives much information respecting the changes in strength and doses. Mr. Squire's work will probably be the chemist and druggist's favourite hand-book.

PROPOSED NEW MEDICAL BILL.

Celsus (Maidstone).—No official notice of the time when the Bill is to be introduced into Parliament has been issued. The Executive Committee of the United Society of Chemists and Druggists received from the Medical Council a promise of a communication on this subject as soon as the sub-committee, having charge of the Bill, met. No doubt the United Society will publish the statement of the Medical Council as soon as it is received. As the opposition to the Bill has been got up by the United Society, unaided by any other body, you had better send your subscription towards the expenses to the Office at 20, New Ormond-street, W.C.

AIR-TIGHT CAPPING FOR BOTTLES.

"Having frequently been at a loss for an efficient yet slightly air-tight capping for bottles, the following occurred to me as answering the purpose tolerably well; viz., enamelled caps of india-rubber something like the I. R. nipples, which would fit over and clasp round the rim of the bottle. I simply throw out this suggestion, and if you think it worthy of a corner in your next issue, it may probably call the attention of some one of your readers to the subject. H."

[We have seen india-rubber caps answering to our correspondent's description, and are surprised that they are so little used.—Ed. C. and D.]

PERCOLATION.

Discipulus (Halifax) writes:—"I have no doubt that a great number of your supporters along with myself have not had much, if any, experience in the making of tinctures by percolation; and as nearly all in the British Pharmacopœia are by that process, I think it very desirable you should devote a little space in an early number to an explanation of the process; i.e. the mode of packing into the percolating cylinders the ingredients used for making tinctures. By doing so, you would confer a favour on one at least of your ardent supporters."

We thank our correspondent for his good suggestion, and promise that the process shall be fully described in an early number. Messrs. Braithwaite and Brough are practically testing the new processes of the Pharmacopœia, and will doubtless make some observations on percolation in their Review when treating of tinctures, but an independent article on the process shall be given as well.

HUGHES'S IODINE.

W. Griffith, of Borrowstownness, has kindly corrected a wrong address in one of Mr. Quin's articles on the Chemical Manufactures of Great Britain:—"At page 277 of the CHEMIST AND DRUGGIST for 1863, you mention 'Hughes of Ireland' as a manufacturer of iodine, and say 'Hughes's iodine is considered by most manufacturers to be the purest in the market, and always commands an advance of a halfpenny or a penny per ounce on that of other makers.' I am not aware of any person named Hughes being a maker of iodine in Ireland. You must refer to Fred. Robt. Hughes and Co., of Borrowstownness, N.B., who produce the pure dry iodine which has commanded an extra halfpenny or penny per ounce for the last twenty-seven years. Their branded iodine is now, however, very scarce, as you can satisfy yourself."

"EAU SEDATIVE DE RASPAIL."

W. G.—The following is Raspail's original formula for common sedative water:—Take of liquor of ammonia (22° Baumé), 3xviij; camphorated alcohol (prepared by dissolving camphor in alcohol of 44° Baumé, until the solution is reduced to 30° B.), 3iij; bay salt, 5ix; water, Oij. Mix the camphorated spirit with the ammonia, and after a while add the salt dissolved in water. Shake the mixture well, and keep it in stoppered bottles. Raspail gives formulæ for stronger lotions; but the above is strong enough for ordinary use, and indeed requires considerable dilution when applied to delicate skins.

FORMULÆ WANTED.

For *Quinine and Orange Wine* that will keep without throwing down a sediment. By "Inquirer."

For the *varnish used by dentists for hardening plaster models*. By P. D.

ANSWERS TO MINOR QUERIES.

Theta (Wells).—We cannot account for the effervescence of the mixture. There is no chemical reason for such a result, and we find that it is not produced when pure articles are employed. Can you send us samples of the two salts for examination?

G. G.—The labels recommend the preparations as beneficial for the relief of certain ailments, and therefore, according to the Stamp Act, render them liable to the duties. Three years ago a respectable chemist in Exeter was fined for selling a preparation labelled "Tincture for Tooth-ache."

R. E. M.—It is certainly subject to the stamp duty. The name alone brings it into the class of proprietary medicines. See answer to G. G. above.

Chemicus.—The Act prohibiting the sale and use of poisoned grain has been in operation since the close of last session.

GAZETTE.

BANKRUPTS.

DANIEL CORFIELD, Thrawl-street, Spitalfields, manufacturing chemist.
EDWARD THOMAS GOLDFINCH, Freemantle, Southampton, chemist.
JAMES HALL, Almondbury, Yorkshire, druggist's assistant.
THOMAS ROBERT PUNCHER, Leicester-place, Leicester-square, chemist's assistant.
JOHN SIMCO, late of Birmingham, chemist.
JAMES THOMAS TAYLOR, Mangotsfield, Gloucestershire, indigo stone blue manufacturer.

PARTNERSHIPS DISSOLVED.

W. FIELD and J. S. CASTLE, Apple-yard, Seward-street, Goswell-street, manufacturing chemists.
GRATTON, BRYAN, and Co., Queenhithe, drysalter.
C. JACKSON and D. RODEN, Broad-street, Ratcliff, wholesale chemists.
PURDY, MAUTE, and Co., manufacturers of albumen.
WORDEN and WHITTAKER, Church, Lancashire, manufacturing chemists.

SCOTCH SEQUESTRATION.

URQUHART, ANDERSON, and Co, Leith, wholesale druggists.



London, March 12, 1864.

In Chemicals a fair business has been transacted during the month, prices showing rather a firmer tone. Tartaric Acid has been sold to a good extent, at 1s. 5½d. Citric Acid moves off steadily, at 1s. 5d. Oxalic has advanced to 9d., in good demand and scarce. Bichromate is firm, at 8d. Prussiate of Potass is dull, at 11½d. Fair sales have been made in Sal Acetos, at 11½d. Chlorate of Potass remains quiet, at 11½d. A large business has been done in Iodine, at from 5½d. to 6½d.; but is now quiet, at 6½d. to 6½d. Soda Ash is steady, at 2d. A large business has been done in Sulphate of Quinine; 12,000 or 15,000 oz. French sold at 5s. 11d. up to 6s. 2d.; English is now held for 6s. 6d. per oz. Sulphate of Copper is lower and dull; last sales made at 33s. to 34s. Sulphate of Ammonia is steady, at 13s. 9d. to 14s. 6d. Sal Ammoniae is firm, at 38s. and 36s. for firsts and seconds. Cream of Tartar rather better; sales made at 108s. to 110s. Bleaching Powder is scarce and firm, at 12s. 6d. to 13s. Soda Crystals are steady, at 92s. 6d. ex ship. Flour of Brimstone is quiet, at 11s. 6d. to 12s. 6d.; and Roll, 10s. Refined Saltpetre is lower, and only small sales, at 39s. 6d. to 40s. f. o. b. Turpentine is again dearer; the latest prices paid for French were 79s. to 80s. A large business has been done in Linseed Oil at higher prices: spot, 36s.; Hull, month, 35s. 9d.; and April to June, 35s. 6d. to 35s. 9d. Large sales have been made in Foreign Brown Rupe, for delivery, at 41s.; on the spot prices are steady, at 40s. 6d., and refined 43s. A fair business has been done in Petroleum, at 1s. 10½d. for refined; Crude is dull at £16. Ashes remain quiet.

There has been more doing in Drugs, and many articles are dearer. About 300 to 400 chests Rhubarb have been

sold, partly on speculation, at 1s. to 1s. 6d. per hoghead higher prices. Large sales have been made in Oil of Aniseed; but on the spot and for arrival the last prices were 6s. 9d. to 6s. 10d. Several parcels of Oil of Cassia have been taken at 9s. 3d. to 9s. 6d., which are also higher prices. Large sales made in Cutch at 26s. 6d. up to 27s. 6d., which is 1s. dearer. Gambier is quiet. More doing in Turmeric, at from 28s. 6d. to 30s. for common to good Bengal. About 1,500 oz. of Camphor have been sold at £5 5s. to £5 15s. for China. A few lots Japan sold at £5 12s. 6d. to £5 17s. 6d. Cochineal has advanced 3d. to 5d. per hoghead, with a good business. Balsam Capivi is in better demand; fair quality sells at the advanced rate of 1s. 9d. Cape Aloes are 1s. to 2s. lower; Barbadoes and other kinds are steady. Some large parcels of Turkey Opium have been sold at 18s. 6d. to 19s. 6d.; and now 19s. 6d. to 20s. is asked for Java. All kinds of Bark are more in request, and are 1d. to 2d. per lb. dearer. Jalap is rather better; good quality sold at 4s. 8d. to 4s. 10d. Several parcels of Sarsaparilla have been sold at firm prices. Turkey Gum Arabic is 2s. to 3s. dearer; East India sorts rather better. Olibanum rather dearer. Shellac is more in demand; mid. to fine orange, £7 10s. to £8 5s. Kowrie Gum is dull, at 3s. to 4s. cheaper. Safflower is less in request, and rather easier to buy. Castor Oil is rather lower; about 1,000 oz. have been sold: mid. to good pale, 4½d. to 5½d.; fine, 6d. to 6½d. Cod Liver Oil is held for 12s. 6d. to 13s. for new. Cardamoms are quieter. Ipecacuanha in small lots sells at 8d. to 8½d. American Oil of Peppermint is 3d. cheaper. Cubebs are held for 95s. to 96s. for fair quality. Senna is without change. Bees Wax remains firm: fine Jamaica sold at £9 to £9 7s. 6d.; and white Madras, £11 to £11 10s. A large parcel of Japan Wax sold at 60s. to 65s. 6d.; and saucer, 67s. to 67s. 6d. In other goods there is no material change.

PRICE CURRENT.

These quotations are the latest for ACTUAL SALES in Mining Lane. It will be necessary for our retail subscribers to bear in mind that they cannot, as a rule, purchase at the prices quoted, inasmuch as these are the CASH PRICES IN BULK. They will, however, be able to form a tolerably correct idea of what they ought to pay.

	1864. s. d.	1864. s. d.	1863 s. d.	1863. s. d.
ARGOL, Cape, per cwt.....	87 6 ..	97 6 ..	85 0 ..	102 6 ..
French	60 0 ..	84 0 ..	40 0 ..	60 0 ..
Oporto, red	46 0 ..	47 0 ..	45 0 ..	48 0 ..
Sicily	70 0 ..	75 0 ..	70 0 ..	78 0 ..
Naples, white	65 0 ..	80 0 ..	65 0 ..	80 0 ..
Florence, white.....	87 6 ..	95 0 ..	90 0 ..	97 6 ..
red	80 0 ..	85 0 ..	80 0 ..	85 0 ..
Bologna, white	90 0 ..	95 0 ..	110 0 ..	115 0 ..
ARROWROOT, (duty 4½ per cwt.)				
Bermuda, per lb.....	1 8 ..	1 11 ..	1 2 ..	1 8 ..
St. Vincent	0 4½ ..	0 8½ ..	0 4 ..	0 7 ..
Jamaica	0 4 ..	0 6 ..	0 4½ ..	0 6½ ..
Other West India	0 3½ ..	0 5 ..	0 3 ..	0 5 ..
Brazil	0 2 ..	0 3 ..	0 2 ..	0 3½ ..
East India	0 3½ ..	0 6 ..	0 2½ ..	0 4½ ..
Natal	0 6 ..	0 10 ..	0 4½ ..	0 9 ..
Sierra Leone	0 5½ ..	0 5½ ..	0 3½ ..	0 5½ ..
ASHES.....per cwt.				
Pot, Canada, 1st sort	31 0 ..	32 0 ..	34 0 ..	0 0 ..
Pearl, ditto, 1st sort	36 0 ..	0 0 ..	33 6 ..	0 0 ..
BRIMSTONE,				
rough.....per ton.....	160 0 ..	0 0 ..	135 0 ..	0 0 ..
roll	195 0 ..	200 0 ..	190 0 ..	0 0 ..
flour	230 0 ..	250 0 ..	240 0 ..	260 0 ..
CHEMICALS,				
Acid—Acetic, per lb.	0 4½ ..	0 4½ ..	0 3½ ..	0 4½ ..
Citric	1 5 ..	0 0 ..	1 6½ ..	1 6½ ..
Nitric	0 5 ..	0 6 ..	0 4 ..	0 5½ ..
Oxalic	0 9 ..	0 0 ..	0 8 ..	0 8½ ..
Sulphuric	0 0½ ..	0 1 ..	0 0½ ..	0 1 ..
Tartaric crystal.....	1 5½ ..	1 5½ ..	1 6½ ..	1 6½ ..
powdered	1 5½ ..	1 5½ ..	1 7 ..	1 7½ ..
Alum	125 0 ..	130 0 ..	145 0 ..	147 0 ..
powder.....	145 0 ..	0 0 ..	160 0 ..	0 0 ..
Ammonia, Carbonate, per lb.	0 5½ ..	0 0 ..	0 5½ ..	0 5½ ..
Sulphate	270 0 ..	200 0 ..	290 0 ..	300 0 ..
Antimony, ore	200 0 ..	210 0 ..	200 0 ..	230 0 ..
crude	26 0 ..	0 0 ..	24 0 ..	28 0 ..
regulus	38 0 ..	0 0 ..	43 0 ..	43 6 ..
French star	38 0 ..	0 0 ..	0 0 ..	43 0 ..
Arsenic, lump	16 0 ..	0 0 ..	16 0 ..	17 0 ..
powder	9 0 ..	9 6 ..	0 0 ..	7 0 ..
Bleaching powder.....	12 6 ..	13 0 ..	9 0 ..	10 0 ..
Borax, East India refined..	55 0 ..	0 0 ..	52 6 ..	0 0 ..
British	56 0 ..	0 0 ..	50 0 ..	52 0 ..
Calomel	2 8 ..	2 9 ..	0 0 ..	2 9 ..
Camphor, refined	1 8 ..	0 0 ..	1 9 ..	2 0 ..
Copperas, green	55 0 ..	0 0 ..	60 0 ..	65 0 ..
Corrosive Sublimate.....per lb.	2 0 ..	2 1 ..	1 11 ..	0 0 ..
Green Emerald	0 0 ..	0 0 ..	0 0 ..	0 0 ..
Brunswick	0 0 ..	0 0 ..	0 0 ..	0 0 ..

	1864. s. d.	1864. s. d.	1863. s. d.	1863. s. d.
CHEMICALS.				
Iodine, dry	0 6½ ..	0 0½ ..	0 3½ ..	0 4 ..
Magnesia, Carbon. per cwt..	42 6 ..	47 6 ..	42 0 ..	45 0 ..
Calcined	1 2 ..	2 0 ..	1 6 ..	1 8 ..
Minium, red	21 3 ..	21 6 ..	22 0 ..	22 6 ..
orange	32 0 ..	33 0 ..	32 0 ..	33 0 ..
Potash, Bichromate per lb.	0 8 ..	0 0 ..	0 7 ..	0 0 ..
Chlorate	0 11½ ..	0 0 ..	1 1 ..	0 0 ..
Hydriodate	0 5½ ..	0 5½ ..	0 4½ ..	0 5 ..
Prussiate.....per lb.	0 11½ ..	0 11½ ..	1 0 ..	0 0 ..
red	1 10 ..	1 11½ ..	2 1 ..	2 2 ..
Precipitate, red	2 8 ..	2 0 ..	2 9 ..	0 0 ..
white	2 8 ..	2 0 ..	2 0 ..	2 10 ..
Prussian Blue	1 0 ..	1 10 ..	1 0 ..	1 10 ..
Rose Pink	29 0 ..	0 0 ..	29 0 ..	0 0 ..
Sal-Acetos	0 11 ..	0 0 ..	0 10½ ..	0 0 ..
Sal-Ammoniac				
British	36 0 ..	38 0 ..	35 0 ..	37 6 ..
Salts, Epsom	8 0 ..	8 3 ..	8 0 ..	8 6 ..
Glauber	3 6 ..	5 6 ..	5 0 ..	5 6 ..
Soda, Ash	0 1½ ..	0 2½ ..	0 2 ..	0 0 ..
Bicarbonate	11 6 ..	12 0 ..	12 0 ..	12 6 ..
Crystals	92 6 ..	0 0 ..	95 0 ..	0 0 ..
Sugar Lead, white per cwt.	38 0 ..	0 0 ..	37 0 ..	0 0 ..
brown	20 0 ..	30 0 ..	25 0 ..	0 0 ..
Sulphate Quinine.....per oz.				
British, in bottle ..	6 6 ..	0 0 ..	7 0 ..	0 0 ..
Foreign	6 2 ..	0 0 ..	6 9 ..	0 0 ..
Sulphate Zinc.....per cwt.	14 6 ..	15 0 ..	14 6 ..	15 0 ..
Verdigris.....per lb.	0 10 ..	1 0 ..	1 1 ..	1 3 ..
Vermilion, English	2 8 ..	3 0 ..	2 8 ..	3 1 ..
China	2 0 ..	2 1 ..	2 2 ..	2 4 ..
Vitriol, blue or Rom. per ct.	30 0 ..	31 0 ..	31 0 ..	33 6 ..
COCHINEAL, per lb.				
Honduras, black	3 4 ..	4 6 ..	2 6 ..	4 2 ..
silver	2 8 ..	3 8 ..	1 4 ..	3 4 ..
Mexican, black	3 8 ..	3 9 ..	2 7 ..	3 0 ..
silver	3 4 ..	3 5 ..	2 6 ..	2 7 ..
Lima.....	0 0 ..	0 0 ..	2 7 ..	3 2 ..
Teneriffe, black.....	3 7 ..	4 0 ..	2 7 ..	3 2 ..
silver.....	3 5 ..	3 8 ..	2 6 ..	2 8 ..
DRUGS,				
Aloes, Hepatic	100 0 ..	170 0 ..	130 0 ..	200 0 ..
Socotrine	170 0 ..	300 0 ..	180 0 ..	500 0 ..
Cape, good	44 0 ..	46 0 ..	45 0 ..	51 0 ..
inferior.....	30 0 ..	42 0 ..	26 0 ..	40 0 ..
Barbadoes	50 0 ..	320 0 ..	60 0 ..	360 0 ..
Ambergris, grey	17 0 ..	19 0 ..	15 0 ..	18 0 ..
Angelica Root	20 0 ..	35 0 ..	20 0 ..	35 0 ..
Aniseed, China star.....	150 0 ..	160 0 ..	100 0 ..	110 0 ..
German, &c.	20 0 ..	39 0 ..	19 0 ..	38 0 ..
Balsam, Canada	0 11 ..	0 0 ..	1 3 ..	0 0 ..
Capivi	1 7 ..	1 0 ..	1 5 ..	1 6 ..
Peru	4 0 ..	4 11 ..	4 10 ..	0 0 ..
Tolu	3 6 ..	3 7 ..	3 10 ..	0 0 ..
Bark, Cascarella.....per cwt.	25 0 ..	40 0 ..	23 0 ..	40 0 ..
Peru, crown & grey per lb.	1 0 ..	2 0 ..	1 0 ..	2 3 ..
Calisaya, flat	3 0 ..	3 4 ..	3 0 ..	3 9 ..
quill.....	2 10 ..	3 4 ..	3 0 ..	3 3 ..
Carthagena.....	1 2 ..	2 0 ..	1 3 ..	2 6 ..
Pitayo	1 8 ..	2 6 ..	1 9 ..	2 6 ..
Red	2 6 ..	8 9 ..	3 0 ..	7 6 ..
Bay Berries.....per cwt.	0 0 ..	0 0 ..	22 0 ..	40 0 ..
Bucca Leaves.....per lb.	0 3 ..	1 0 ..	0 2½ ..	1 6 ..
Camomile Flowers	30 0 ..	70 0 ..	35 0 ..	70 0 ..
Camphor, China	115 0 ..	120 0 ..	120 0 ..	127 6 ..
Canella alba	25 0 ..	35 0 ..	19 0 ..	38 0 ..
Cantharides	2 6 ..	0 0 ..	2 3 ..	2 4 ..
Cardamoms, Malabar, good	5 9 ..	6 6 ..	6 9 ..	7 3 ..
inferior	4 0 ..	5 6 ..	5 8 ..	6 8 ..
Madras	3 6 ..	5 3 ..	3 6 ..	5 8 ..
Ceylon	4 6 ..	5 1 ..	4 9 ..	5 0 ..
Cassia Fistula.....per cwt.	20 0 ..	35 0 ..	15 0 ..	61 0 ..
Castor Oil, 1st pale	0 5½ ..	0 6½ ..	0 6 ..	0 6½ ..
2nd	0 4½ ..	0 5½ ..	0 5½ ..	0 5½ ..
inferior and dark	0 4½ ..	0 4½ ..	0 4½ ..	0 5½ ..
Bombay, in casks	0 4½ ..	0 4½ ..	0 6 ..	0 5½ ..
Castorum.....	1 0 ..	20 0 ..	1 2 ..	26 0 ..
China Root	16 0 ..	17 0 ..	10 0 ..	15 0 ..
Cocculus Indicus	18 0 ..	22 0 ..	10 0 ..	10 0 ..
Cod Liver Oil	7 0 ..	12 0 ..	4 2 ..	6 0 ..
Colocynth, apple	0 6 ..	0 11 ..	0 8 ..	1 0 ..
Colombo Root	70 0 ..	91 0 ..	15 0 ..	48 0 ..
Cream Tartar				
French.....	108 0 ..	110 0 ..	115 0 ..	117 6 ..
Venetian	110 0 ..	113 6 ..	117 6 ..	0 0 ..
grey	95 0 ..	100 0 ..	110 0 ..	0 0 ..
brown	85 0 ..	95 0 ..	97 6 ..	105 0 ..
Croton Seed	70 0 ..	80 0 ..	42 0 ..	60 0 ..
Cubebs	92 6 ..	97 6 ..	105 0 ..	115 0 ..
Cummin Seed.....	23 0 ..	30 0 ..	27 0 ..	35 0 ..
Dragon's blood reed.....	200 0 ..	300 0 ..	200 0 ..	300 0 ..
lump	90 0 ..	260 0 ..	95 0 ..	260 0 ..
Galangal Root	20 0 ..	23 0 ..	23 0 ..	32 0 ..
Gentian Root	18 0 ..	19 0 ..	21 0 ..	22 0 ..
Guinea Grains	75 0 ..	77 0 ..	47 6 ..	50 0 ..
Honey, Narbonne	40 0 ..	80 0 ..	60 0 ..	80 0 ..
Cuba	26 0 ..	38 0 ..	24 0 ..	36 0 ..
Jamaica	27 0 ..	63 0 ..	26 0 ..	75 0 ..
Ipecacuanha.....per lb.	8 0 ..	8 2 ..	6 10 ..	7 0 ..
Isinglass, Brazil	2 0 ..	4 8 ..	0 10 ..	3 6 ..
East India	0 0 ..	4 3 ..	0 9 ..	3 0 ..
West India	3 2 ..	3 4 ..	3 0 ..	3 3 ..
Russian	9 6 ..	12 0 ..	9 6 ..	13 0 ..
Jalap.....	0 0 ..	5 0 ..	1 0 ..	5 0 ..

DRUGS—continued.		1861.	1861.	1863.	1863.	OILS—continued.		1864.	1864.	1863.	1863.
		s. d.	s. d.	s. d.	s. d.			s. d.	s. d.	s. d.	s. d.
Juniper Berries	per cwt.	8 0	9 0	8 0	9 0	Madras	per cwt.	40 0	41 0	50 0	0 0
German and French		8 0	10 0	8 0	10 0	Palm, fine		36 0	36 0	35 0	39 0
Italian		0 0½	0 0½	0 0½	0 0	Linseed		36 0	0 0	43 0	0 0
Lemon Juice	per deg.	0 0½	0 0½	0 0½	0 0	Rapeseed, English, pale		42 6	0 0	53 6	0 0
Liquorice	per cwt.	80 0	80 0	83 0	90 0	brown		40 0	0 0	51 0	0 0
Spanish		60 0	80 0	85 0	95 0	Foreign ditto		43 0	0 0	51 6	0 0
Italian		2 9	3 6	3 0	3 6	brown		40 6	0 0	51 6	52 0
Manna, flaky		1 4	1 6	1 6	0 0	Lard		46 0	48 0	47 0	0 0
small		20 0	31 0	18 0	23 0	Tallow		41 0	41 6	39 0	40 0
Musk	per oz.	11 0	16 0	9 0	11 0	Rock Crude	per ton	16 0	0 0	10 0	14 0
Nux Vomica		18 0	20 0	16 0	19 0	OILS, Essential—					
Opium, Turkey		9 0	16 0	7 0	12 0	Almond, essential	per lb.	19 0	0 0	19 0	0 0
Egyptian		26 0	28 0	26 0	28 0	expressed		0 0	0 0	0 0	0 0
Orris Root	per cwt.	3 0	3 6	3 0	3 3	Aniseed	per cwt.	110 0	120 0	110 0	120 0
Pink Root	per lb.	140 0	0 0	90 0	100 0	Bay		7 0	10 0	7 0	10 6
Quassia (bitter wood) per ton		0 8	151 10	0 9	1 3	Bergamot	per lb.	0 2½	0 2½	0 2½	0 2½
Rhatany Root		3 0	6 0	1 6	4 4	Cajeputa, (in bond)	per oz.	4 3	5 6	4 3	5 6
Rhubarb, China, round		3 3	0 3	1 9	4 6	Caraway	per lb.	9 3	9 6	8 3	8 4
flat		0 0	0 0	5 6	4 6	Cassia		0 2	0 4½	0 2	0 4½
Dutch, trimmed		12 6	13 0	12 6	18 0	Cinnamon (in bond)	per oz.	1 0	2 9	1 6	3 6
Russian		32 0	0 0	34 0	36 0	Cinnamon Leaf		0 5½	0 6½	0 6½	0 6½
Saffron, Spanish	per cwt.	120 0	125 0	140 0	150 0	Citronel		0 2	0 4	0 2	0 4
Sarsaparilla, Lima		0 10	1 0	0 10	1 4	Clove		0 0	0 0	0 0	0 0
Para		0 10	1 2	0 9	1 1	Croton		1 10	3 0	1 10	3 0
Honduras		0 10	1 6	0 8	1 3	Lavender		2 6	4 6	2 6	4 6
Jamaica		1 6	2 4	1 2	2 2	Lemon		5 6	7 0	4 0	9 0
Sassafras	per cwt.	14 0	15 0	0 0	0 0	Lemongrass	per oz.	0 10½	0 11	0 0½	0 7
Scammony, virgin	per lb.	30 0	38 0	27 0	34 0	Mace, ex.		0 1	0 2½	0 1½	0 2
secoud		12 0	23 0	14 0	24 0	Neroli		5 0	7 0	5 0	7 0
Seneka Root		4 6	4 9	4 6	4 9	Nutmeg		0 1½	0 2½	0 1	0 2
Senna, Calcutta		0 0	0 0	0 0	0 0	Orange	per lb.	6 0	7 0	5 0	6 6
Bombay		0 2½	0 3½	0 2½	0 4	Otto of Roses	per oz.	15 0	25 0	14 0	22 0
Tinnevely		0 4	1 7	0 4	1 9	Peppermint, per lb.		9 0	14 3	8 0	13 0
Alexandria		0 3½	0 8	0 5	0 7	American		34 0	36 0	33 0	34 0
Snake Root		5 0	6 0	3 6	0 0	English		3 6	5 6	3 6	5 6
Spermaceti, refined		1 0	1 2	1 0	1 2	Rhodium	per oz.	1 9	3 0	1 8	3 0
Squills		0 1	0 2½	0 1	0 2½	Rosemary	per lb.	4 0	4 6	3 0	4 0
Tamarinds, E. India, per cwt.		12 0	14 0	10 0	13 6	Sassafras		5 0	8 6	5 0	8 6
West India		14 0	22 0	18 0	34 0	Spearment		0 0	0 0	1 3	1 6
Terra Japonica—						Spike		1 9	2 3	1 9	2 3
Gambier	per cwt.	22 0	25 0	20 0	21 0	Thyme		12 0	0 0	12 0	0 0
Cutch		27 0	27 6	25 0	26 0	Swedish		0 0	0 0	0 0	0 0
Valerian Root, English		20 0	30 0	20 0	40 0	PITCH, British	per cwt.	35 6	36 6	37 6	38 6
Vanilla Mexican	per lb.	20 0	38 0	25 0	55 0	English, 6 per cent. or under		34 6	35 6	35 6	37 0
Wormseed	per cwt.	2 0	0 0	2 0	0 0	over 6 per cent.		34 0	35 0	35 0	36 6
GUM	per cwt.					Madras		32 0	33 6	32 0	36 0
Ammoniac, drop		100 0	120 0	100 0	120 0	Bombay		39 6	40 0	40 6	41 6
lump		20 0	85 0	15 0	65 0	British-refined		15 6	16 6	13 9	14 0
Anmi, fine pale		200 0	220 0	220 0	250 0	Nitrate of soda	per qr.	56 0	62 0	40 0	50 0
bold amber		190 0	210 0	200 0	220 0	Caraway, English	per cwt.	28 0	34 0	0 0	0 0
medium		160 0	180 0	160 0	180 0	German, &c.		27 0	30 0	0 0	0 0
small and dark		100 0	150 0	100 0	125 0	Coriander		10 0	14 0	10 0	12 0
ordinary dark		40 0	95 0	50 0	95 0	East India		0 0	0 0	10 6	11 0
Arabic, E. I., fine pale picked		60 0	65 0	52 0	59 0	Hemp		37 0	40 0	40 0	44 0
unsorted, good to fine		44 0	55 0	34 0	43 0	Linseed, Black Sea		54 6	55 0	64 0	60 0
red and mixed		82 0	46 0	20 0	30 0	Calcutta		54 0	59 0	63 0	68 0
siftings		15 0	30 0	15 0	30 0	Bombay		60 0	61 0	70 0	71 0
Turkey, picked, good to fine		120 0	160 0	115 0	180 0	Egyptian		58 0	0 0	62 0	65 0
second and inferior		65 0	110 0	40 0	110 0	Mustard, brown	per bush.	7 0	12 0	7 0	12 0
in sorts		32 0	50 0	32 0	50 0	white		8 0	10 0	7 0	8 6
Gedda		50 0	34 0	22 0	24 0	Poppy, East India	per qr.	50 0	51 0	61 0	62 0
Barbary, white		54 0	64 0	39 0	50 0	Rape, English		0 0	0 0	0 0	0 0
brown		36 0	37 0	26 0	27 0	Danube		0 0	0 0	0 0	0 0
Australian		27 0	30 0	23 0	25 0	Calcutta fine		52 0	0 0	67 0	70 0
Assafoetida, fair to good		30 0	70 0	30 0	112 0	Bombay		54 0	0 0	70 0	78 0
Benjamin, 1st quality		350 0	630 0	350 0	630 0	Teel, Sesny or Gngy		58 0	62 0	67 0	72 0
2nd		280 0	300 0	280 0	300 0	Cotton	per ton	150 0	157 6	170 0	180 0
3rd		60 0	240 0	50 0	200 0	Ground Nut Kernels	per ton	260 0	0 0	340 0	350 0
Copal, Angola, red		85 0	90 0	95 0	100 0	SOAP, London yel.	per cwt.	20 0	34 0	22 0	36 0
pale		85 0	95 0	85 0	100 0	mottled		34 0	36 0	50 0	0 0
Benguella		80 0	100 0	85 0	100 0	curd		46 0	50 0	40 0	41 0
Sierra Leone	per lb.	0 4	1 0	0 6	1 6	Castile		40 0	41 0	40 0	41 0
Manilla	per cwt.	35 0	55 0	18 0	44 6	Marseilles		40 0	42 0	40 0	42 0
Dammar, pale	per cwt.	38 0	45 0	36 0	48 0	Soy, China	per gal.	2 6	2 9	2 6	2 7
Galbanum		100 0	120 0	100 0	120 0	Japan		0 0	0 0	0 10	1 0
Gamboge, picked, pipe		160 0	190 0	160 0	200 0	Sponge, Turkey, fine picked		19 0	23 0	20 0	24 0
in sorts		90 0	150 0	90 0	150 0	fair to good		7 0	17 0	8 0	18 0
Guaiacum	per lb.	0 6	1 5	0 6	1 5	ordinary		2 6	6 0	3 0	6 0
Kino	per cwt.	300 0	400 0	160 0	240 0	Bahama		0 4	1 3	0 4	1 3
Kawrie		42 0	65 0	36 0	38 0	TURPENTINE, Rough, per ct.		0 0	0 0	0 0	0 0
Mastic, picked	per lb.	4 6	5 0	5 0	5 3	Spirits, French		80 0	0 0	95 0	0 0
Myrrh, gd. and fine, per cwt.		140 0	190 0	150 0	170 0	American, in casks		0 0	0 0	110 0	0 0
in sorts		70 0	130 0	70 0	130 0	WAX, Bees, English		170 0	175 0	170 0	175 0
Olbanum, pale drop		72 0	78 0	60 0	07 6	German		165 0	185 0	162 6	180 0
amber and yellow		48 0	70 0	45 0	56 0	American		175 0	180 0	165 0	175 0
mixed and dark		16 0	35 6	16 0	35 0	white fine		0 0	0 0	0 0	0 0
Senegal		75 0	0 0	42 0	46 0	Jamaica		185 0	192 6	165 0	180 0
Sandrac		85 0	102 6	85 0	110 0	Gambia		175 0	180 0	170 0	175 0
Tagacanth, leaf		180 0	260 0	180 0	300 0	Mogadore		125 0	160 0	120 0	155 0
in sorts		100 0	130 0	100 6	130 0	East India		150 0	175 0	140 0	170 0
OILS	per tun	£ s.	£ s.	£ s.	£ s.	ditto, bleached		210 0	250 0	170 0	230 0
Sal		41 0	48 10	42 0	47 10	vegetable, Japan		58 0	75 0	63 0	85 0
Sperm, body		74 0	75 0	84 0	85 10	WOOD, Dye, per ton					
Col		48 0	0 0	47 10	48 0	Fustic, Cuba		175 0	185 0	140 0	155 0
Whale, Greenland		0 0	0 0	0 0	0 0	Jamaica		135 0	140 0	120 0	130 0
South Sea, pale		42 0	48 0	42 0	44 0	Savanna		125 0	0 0	120 0	125 0
East India Fish		39 10	42 0	38 10	39 0	Zanto		140 0	150 0	105 0	0 0
Olive, Gallipoli	per ton	58 0	59 0	59 0	0 0	Logwood, Campeachy		100 0	200 0	180 0	100 0
Florence, half-chest		20 0	21 0	1 0	1 2	Honduras		120 0	0 0	125 0	140 0
Cocoonut, Cochiti	per cwt.	43 0	44 0	53 10	54 0	St. Domingo		90 0	95 0	105 0	110 0
Ceylon		39 0	40 0	51 0	51 10	Jamaica		85 0	90 0	100 0	102 6
Sydney		36 0	38 0	46 0	52 0						
Ground Nut and Gin.											
Bombay		38 0	30 0	47 10	0 0						